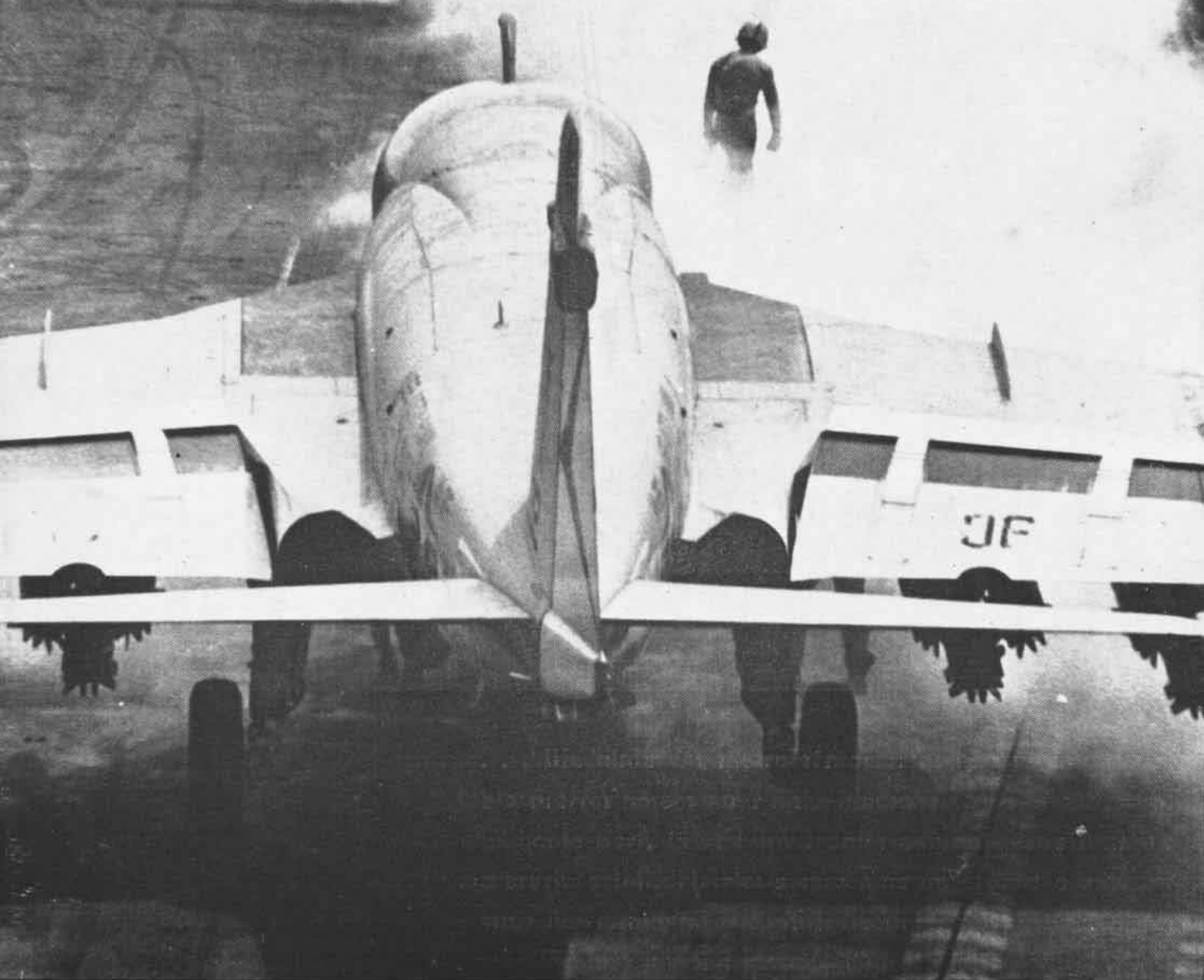


NAVAL AVIATION

# NEWS



48th Year of Publication

**JUNE 1967**

NavAir No. 00-75R-3





## ***STRENGTHENING THE DAM***

'SEATO is a defensive arrangement. It faces the reality that, unless security can be achieved, there is little chance for independent nations in the area to build toward conditions in which their welfare and prosperity can be advanced. . . . All together, the growing contributions of SEATO nations have strengthened the dam against aggression . . . and, above all, given practical effect to the idealistic words of alliance.'

—General Earle G. Wheeler before SEATO Military Advisors



NAVAL AVIATION

# NEWS

FORTY-EIGHTH YEAR OF PUBLICATION JUNE 1967

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- Intruder Symposium 6** *Three writers recount the experiences of A-6A squadrons in Vietnam and indicate the scope of the training program that supports overseas operations.*
- Where the Action is 14** *A brief summary of certain effective aerial strikes made by Naval Aviators from the attack carriers USS Enterprise, Kitty Hawk and Ticonderoga off Vietnam.*
- Trained to Save 17** *The thorough training of a helicopter pilot, Lt. Bob Parkinson, for search and rescue is described.*
- Up, Up—and on the Deck 20** *Helicopter Combat Support Squadron One provides a "center spread" showcase of the actual at-sea SAR drills.*
- Just 50 Years Ago 22** *In the third installment of the series on Naval Aviation, WW I, Joe C. Cline, Naval Aviator No. 1832, describes the arrival of Navy's First Aeronautic Detachment in France, flight training of the Americans by French aviators and the detachment's service abroad.*

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*Issuance of this periodical approved in accordance with Department of the Navy Publications and Printing Regulations, NAVEXOS P-35*

## ■ COVERS

Photo of an A-6 Intruder preparing for launch from the deck of USS Kitty Hawk (CVA-63) was taken by JOC Robert Moeser. . . Above, TA-4F of VA-127 was caught by PH2 D. L. Anderson. . . On back cover, stilled prop of USS Shangri La (CVA-38) is work of PH2 J. A. Travelstead.

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# NAVAL AVIATION NEWS

## NEW WINGS ARE OFFICIALLY NAMED

At NAS NORFOLK April 1 and at NAS NORTH ISLAND April 20, recommissioning ceremonies changed the designations of Carrier Airborne Early Warning Squadrons 12 and 11 to Carrier Airborne Early Warning Wings 12 (CAEWW-12) and 11 (CAEWW-11) respectively.

On the East Coast, Admiral Thomas E. Moorner, Commander in Chief of the Atlantic Fleet, was the principal speaker. Guest speakers for ceremonies on the West Coast were Vice Admiral A. M. Shinn, ComNavAir Pac, and Captain H. B. Stott, ComFAir San Diego.

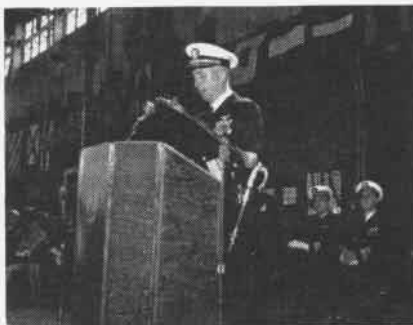
At the same time in the Western Pacific, two attack aircraft carriers, USS *Kitty Hawk* (CVA-63) and USS *Enterprise* (CVAN-65), conducted ceremonies commissioning their Airborne Early Warning Detachments as full squadrons under the new CAEWW-11 arrangement.

In Norfolk, Captain Joseph A. Pariseau, USN, assumed command of CAEWW-12 and VAW-121. Commander Lucio W. Hill assumed command of VAW-123. At the same time, VAW-122 was commissioned aboard USS *America* in the Mediterranean, under the command of Commander Theodore E. Newark.

The new VAW-121 will fly the old VAW-12's E-1B *Tracers*. VAW-122 and VAW-123 will have the new E-2A *Hawkeye* aircraft which are scheduled to replace all the E-1B's eventually.

The West Coast organization, Airborne Early Warning Wing 11, commanded by Captain R. R. Yount, is comprised of seven squadrons, each with a commanding officer and all based at North Island.

Five squadrons fly the E-2A



ADMIRAL MOORNER GIVES ADDRESS

*Hawkeye*; VAW-112, deployed in the *Enterprise*, commanded by Cdr. F. D. Goetschius; VAW-113, commanded by Commander J. R. Eckstein; VAW-114, currently deployed in *Kitty Hawk*, commanded by Commander L. H. C. Thiel; VAW-115, commanded by Commander J. J. Weaver; and VAW-116, commanded by Commander K. E. Wolff. Each *Hawkeye* squadron will have four aircraft requiring five-man crews. Total personnel per squadron will number about 25 officers and 106 enlisted men.

One new squadron, VAW-111, flies E-1B *Tracers* under the command of Commander J. W. Fowler. The squadron deploys under the old detachment system, each detachment consisting of 16 officers and 40 enlisted men, and three or four aircraft requiring four-man crews.

The training squadron, Carrier Airborne Early Warning Replacement Squadron 110 (RVAW-110), is commanded by Commander B. C. Rudy.

The reorganization of the two wings is designed to stress the importance of airborne early warn-

ing to the Fleets and, at the same time, provide greater opportunity for advancement to officers and enlisted men engaged in it.

## NATWP Officers Honored Twelve Receive Air Force Medal

At NAS MOFFETT FIELD, Calif., recently, 12 officers of the Naval Air Transport Wing, Pacific (NATWP), were awarded the Air Force Commendation Medal.

The officers, all staff department heads of the wing, were honored for meritorious service in the performance of their staff duties. They were also cited for professionalism and devotion to duty in connection with the outstanding record achieved by the command while operating under the Military Airlift Command.

Captain Sam E. Clark, Commander NATWP, presented the medals to Commanders R. G. Burnett, C. D. Krantz, R. L. LeBeck, R. L. Ekelund; LCdrs. C. J. Stoltenberg, R. A. Wilkerson, H. N. Sherman, J. F. Grady, E. M. Broadhead, F. R. Fuller; and Lts. W. C. Kersten, J. S. Steward and C. C. Barber.

NATWP is disestablished as of June 30.

## Last Flight Made by VR-22 Supplies Delivered to Vietnam

On March 31, the last operational flight of the Naval Air Transport Wing, Pacific—made by Air Transport Squadron 22—returned to NAS MOFFETT FIELD, Calif., from Da Nang. The round trip flight to deliver supplies to Vietnam originated at Moffett on March 27.

The return of the C-130 *Hercules* officially ended an era of partnership between the Wing and the Air

Force's Military Airlift Command. Captain Charles D. (Spider) Webb, commanding officer of VR-22, was at the controls of the *Hercules* when it landed at Moffett.

## New Graduate School Opens Provides Professional Training

The Naval School of Aeronautical Sciences, designed to provide a professional education program for Navy flight students, has officially opened at Pensacola.

The first class of 32 volunteers has completed the primary phase of flight training. As graduates of colleges throughout the country, they have been carefully screened to insure above-average scholastic and flight aptitude.

The new school, conducted by the Chief of Naval Air Basic Training, includes on its faculty both civilian and military members. Captain Robert S. Adams is the director. VT-6 provides the flight instruction for the nine-month course.

The long-range objectives of the school are the development of a cooperative degree program with appropriate universities and the establishment of an educational center in aeronautics. Another aim is to secure and retain Naval Aviators by providing them with an outstanding, professional education.

## More Intruders in Vietnam VMA(AW)-533 is with MAG-12

On April 1, a second A-6A *Intruder* aircraft squadron joined Marine Aircraft Group 12 of the 1st Marine Aircraft Wing in Vietnam.

The *Intruders* of VMA(AW)-533 landed at Chu Lai after completing a trans-Pacific flight that originated at MCAS CHERRY POINT, N.C., March 21.

The two flights touched down approximately 30 minutes apart to be greeted by Major General Louis B. Robertshaw, CG, MAW-1, and Col. Baylor P. Gibson, Jr., commanding officer of MAG-12.

The first flight was under the command of Maj. Paul R. Jones, and the second was led by Lieutenant Colonel William F. Brown, the skipper of VMA(AW)-533.



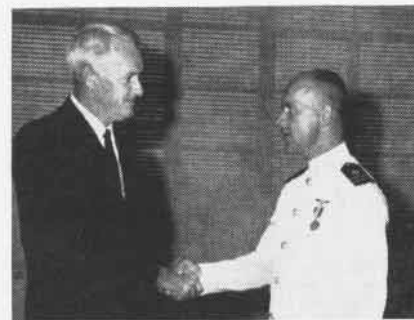
IN AN APRIL change-of-command ceremony, Vice Admiral Wm. I. Martin relieved Vice Admiral Frederick Ashworth as Commander, 6th Fleet. VAdm. Martin was formerly Asst. Chief of Naval Operations (Air).

## Ground Broken at Memphis New School Building is Started

On April 17, ground-breaking ceremonies were held at NAS MEMPHIS, Tenn., for a new Aviation Electronics School building. The two-story, 80-room structure will have classrooms and laboratories with training facilities for 2,000 students.

The \$1,796,000 building will consolidate into one area a vital training program of Navy and Marine electronics technicians. The school is now scattered about the air station in six buildings.

Construction of the 97,441 square-foot building will take a year.



PRESIDENT of the Pensacola Council of the Navy League, Mr. Hugh J. Leitch, congratulates Lt. William P. Behning for being named top flight instructor of the Naval Air Training Command, for which he received the David S. Ingalls Award. As an instructor, Lt. Behning formerly was attached to VT-28.

## New Vigilante Contract

### RA-5C Production to Continue

The Naval Air Systems Command has awarded a \$5.7 million contract to North American Aviation's Columbus Division for long lead time effort in initiation of the Government's decision to continue production of the RA-5C *Vigilante* tactical reconnaissance aircraft.

Total value of the new production program is expected to be in excess of \$150 million. Production will follow completion of the current RA-5C contracts with initial deliveries to begin in early 1969 and continue into 1971, according to estimates at this time.

The RA-5C, combined with an integrated operational intelligence system (IOIS) aboard major aircraft carriers, gives the Navy superior reconnaissance capability.

"The RA-5C (IOIS) has been doing an outstanding job in uncovering targets in North Vietnam and along its coasts," according to Vice Admiral T. F. Connolly, Deputy Chief of Naval Operations (Air).

## New Flight Gloves in Use Sent to Southeast Asia Units

The Naval Air Systems Command has just completed distribution to the Fleet of approximately 6,000 pairs of the newly developed fire-resistant knitted fabric/leather palm summer flight gloves. The first shipment went to squadrons which are currently deployed in Southeast Asia.

The new gloves have a double-knit fabric back of fire-resistant polyamide fiber (NOMEX) which should significantly reduce skin burns on the hands during aircraft fires. They are designed to combine the good wearing and finger tactility properties of washable sheepskin leather palms with the comfort, coolness and fire protection of the specially knitted fabric backs.

The gloves join the growing number of newly developed Navy flight clothing items designed for maximum fire protection consistent with pilot comfort and cockpit compatibility.

The Army and Air Force are testing and evaluating the gloves.



# GRAMPAW PETTIBONE

## Ramp Thumper

A flight of four F-8E's launched shortly after lunch and headed seaward to conduct refresher carrier qualification landings. Once the flight established positive radio communication with the ship, they were given an expected approach time.

The division departed marshall on time and dumped sufficient fuel to arrive at the ramp at landing weight. As number two man commenced his first approach, he discovered he had no radio and took a voluntary waveoff. His second pass resulted in a foul-deck waveoff but he did regain two way communications with the radio on this approach. On his third pass, the driver went into APC (automatic power compensator) and rolled out in the groove with a high start.

The *Crusader* continued on down with no recognition of a low ball or even a tendency to go low. The next transmission was Paddles calling, "Wave it off." He backed up the call with the waveoff lights. The pilot went to full throttle and moved his scan from the lens to the ramp. Almost simultaneously, he lit the afterburner as it



*That isn't  
oil! That's hair!*

G.P.

was obvious he was going to strike the ramp. Next, he felt what seemed to be the tail striking the ramp and, without hesitation, he reached for the face curtain and pulled it with both hands.

The ejection sequence was normal and he landed safely in the water off the port quarter of the ship while the disabled *Crusader*

proceeded off the angled deck and headed for the deep six.



*Grampaw Pettibone says:*

Great jumpin' Jehosaphat! Why do these young fellas keep pushin' the odds on surviving a ramp strike? It's a pretty well known fact that the pilot and his aircraft will lose every one of these encounters.

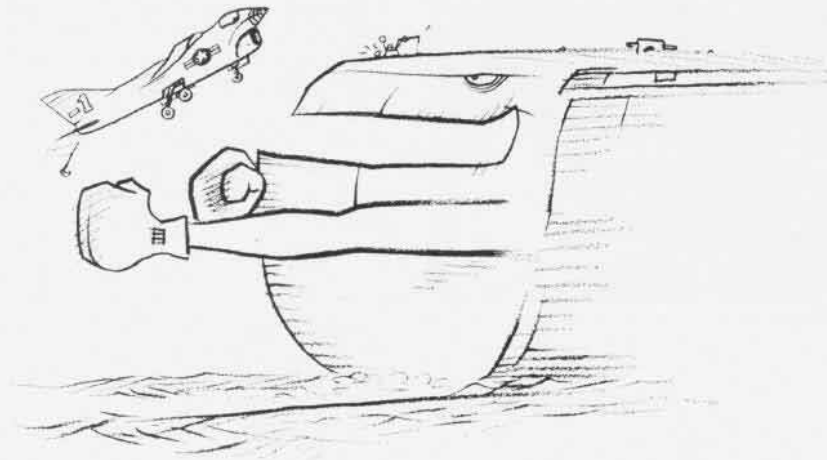
A bit of sage advice on the inside back cover of the April 1966 issue of *Approach* is worthy of repeatin'. "Only constant vigilance and strict attention to the exacting demands of carrier landings will prevent the recurrence of accidents of this type. Positive measures must be taken to ensure that pilots continue to be reminded at frequent intervals of the consequences of making large corrections in close, and of the necessity to initiate an immediate waveoff whenever the meatball is lost late in the approach without attempting to salvage the approach. In addition, it is recommended that LSO's continue to be reminded and encouraged to monitor each carrier pass with an objective eye. Standards should not be altered to match individual pilot capability, more capable pilots must not be burdened by the LSO's expectation that they will somehow salvage their infrequent poor approaches."

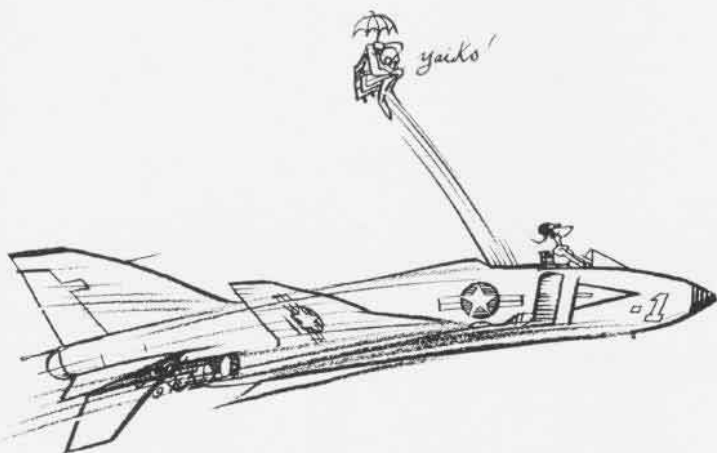
Amen! Don't believe Ol' Gramps could add much to that. I recommend you CV types reread "Power! Power! Power!" on page 24 of the same issue.

## Phlamed Out

This particular pair of *Phantom* phlyers was scheduled to fly as number four in a four-plane *Sparrow* missile-firing flight. After departure, the leader experienced an auxiliary air door malfunction and returned to base. Number two assumed the lead and headed for the designated firing range. All three aircraft attempted to fire but, owing to problems with the ground controller's radar, they were unable to do so. The flight then departed the firing area and set up an orbit in trail to burn down fuel southeast of the home field at 10,000 feet.

After a few turns in this pattern,





all three aircraft were down to landing weight and the flight leader took up a heading for the initial to the duty runway, simultaneously instructing the flight to join up. Number three, believing that number two had lost sight of the leader, attempted to lead him in the rendezvous. As number three approached the leader from slightly above and astern, he realized the closure rate was excessive, so he retarded the throttles and extended the speed brakes.

Shortly thereafter, all electrical power was lost, both engines were unwinding through 35 percent, airspeed was 300K and the altimeter read 1,700 feet. The distraught driver attempted to re-light the starboard engine by activating the ignition button but met with failure. (RPM on both engines was down to 20 percent by this time.)

Again he attempted to airstart the starboard engine by checking the left throttle in the OFF position, positioning the right throttle to idle and depressing the right ignition button. While the pilot was holding the ignition button, his RIO yelled, "Do you want me to eject?" To which he replied, "Affirmative."

After the RIO departed, the pilot turned his attention to the left engine and met with failure again. During this interlude, the *Phantom* continued its descent and at this moment was down to 400 feet, indicating 200 knots. Noting the

acuteness of the situation, the unfortunate driver followed the example of his RIO and ejected. Both flyers enjoyed successful ejections and were retrieved in short order by the station helo.



**Grampaw Pettibone says:**

Oh, my achin' ulcers! The board concluded that contributing cause factors to this fiasco were "the pilot's perceptual error which led to a high closure rate necessitating rapid retardation of the throttles, the impaired physical condition of the pilot's left thumb (due to previous fracture) resulting in his unorthodox grip on the throttles, and 'body English' which may have caused excessive lateral forces to be applied to the throttles."

Well, I've heard everything now. Sure, we can afford improvement in design but we can't legislate against poor headwork. I seriously doubt if it would've helped this youngster anyway. First of all, we've gotta accept a missed rendezvous once in a while and take it like a man by sliding outside to a safe distance. Secondly, drivers like this fella had better bone up on the right procedure for restarting after a dual flame-out.

A little more *Know* and a little less *Hope* will save us a lot of airplanes and pilots, not to mention boosting the morale of the next-of-kin.

## Gear Grinder

Following a routine preflight, the *Crusader* pilot made a start and taxied out to the duty runway. After receiving clearance to take

the runway, he taxied into position and conducted a full-power check-out. Noting no discrepancies, he released his brakes and lit the burner shortly after commencing the take-off roll. Approaching 125 knots, the pilot rotated to takeoff attitude and very shortly thereafter, thinking he was airborne, retracted the gear. The fuselage settled back on to the runway immediately. Despite extensive scraping and grinding of the gear doors and the bottom of the fuselage, the *Crusader* continued to accelerate and became airborne.

The amazed *Crusader* jockey made a turn to avoid a populated area and decided to assess the situation. There were no warning lights illuminated nor were there any other signs of trouble in the cockpit, so he requested the tower to divert an aircraft to conduct a visual inspection of his aircraft. No other aircraft being immediately available, it was decided that the pilot should lower the gear and fly by the tower for a check. The driver lowered the gear handle and noted all three gear indicated down and the hydraulic pressure normal. A low fly-by was conducted; the air traffic controller confirmed the gear was down. The pilot remained in the landing configuration and after making arrangements for a short field arrestment, made it without further damage.



**Grampaw Pettibone says:**

Great balls of fire! If this stunt doesn't shake the dew off the lily, nothin' will.

Here's an above average fighter pilot, with two WestPac cruises under his belt, that just couldn't stand prosperity. This fellow, a bit bored by a routine test hop, thought he'd spice it up a bit by executin' a sharp takeoff. There's nothing wrong with a sharp takeoff, but when it leads to a departure from flight discipline, the "professionalism" required in the execution becomes overshadowed by plain old "showmanship."

There are two dangerous periods in a pilot's life: One, when he's a young cub just learning to become a tiger, and two, when he's a battle-scarred tiger with plenty of time in model and maybe gettin' a few too many automatic reactions and becoming too relaxed. (Wish I had a quarter-inflation, you know—for every time I've said that.)



# THE AMAZING INTRUDER AIRCRAFT PROVES ITSELF IN VIETNAM

DEVELOPED as the first Navy all-weather, medium-attack airplane, the A-6A *Intruder* has far exceeded expectations and may well be the forerunner of advanced carrier-based weapon systems for the next decade. Based on results of early combat deployments, the aircraft and its impressive array of electronic equipment have proved to be an invaluable asset during missions over North Vietnam.

The *Intruder* has filled a chronic operational void beyond the capacity of other carrier strike aircraft through its ability to deliver meaningful payloads, day or night, with little regard for haze, fog or cloud cover. *Intruders* have consistently demonstrated their aptitude for this

By Lt. James J. Mulquin, USNR

work as well as their capability in special electronic "jamming." The latter has become an increasingly essential art with the emergence of modern surface-to-air (SAM) missile defenses.

The first A-6 combat missions were flown in early July 1965 by Attack Squadron 75, the *Sunday Punchers*. As the first operational A-6A unit, the *Punchers* launched their *Intruders* from *Independence* against key highway bridges at Bac Bang and other targets in an area 80-125 miles south of Hanoi.

Later in the month, a pair of VA-75 A-6A's demonstrated one facet of their capability, depositing

many tons of Mk. 83 and Mk. 84 bombs on the Thanh Hoa power plant, 80 miles south of Hanoi. The attack, conducted under cover of night, employed radar to locate and identify the target complex. This proved of particular significance. From this point, industrial and transportation centers, which had heretofore enjoyed a relatively secure, if brief, nocturnal respite, could expect to be hit round the clock as the full potential of sea-based striking force was applied.

VA-75 continued to pound North Vietnamese highways, railroad depots, barracks, ammunition and fuel concentrations until completion of their deployment in November. The operational pace char-

acteristic of Yankee Station was somewhat quicker than that imposed on most attack carriers. Between July and September, *Independence* recorded catapult launches and arrested landings in excess of prevailing averages. The inevitable combat losses sustained were almost all the result of massed ground anti-aircraft fire. Despite these, the over-all contribution of VA-75 to the effort above and below the Demilitarized Zone (DMZ) was a singular one and resulted in standardization of many combat and operational techniques for succeeding squadrons.

In November, the second A-6A unit arrived in *Kitty Hawk* and initiated strike operations from Yankee and Dixie Stations in the South China Sea. The *Black Falcons* of Attack Squadron 85, recently attached to the *Forrestal*, had in the past year completed their conversion from the A-1H *Skyraider* at NAS Oceana. Like their predecessors, they had accelerated the A-6A training schedule in order to meet the WestPac deployment date. These units, which previously had been light attack squadrons (propeller-driven) in the Atlantic Fleet air wings, had been dispatched westward in direct response to the critical need for A-6 support in the Far East.

VA-85 was equipped with a later *Intruder* version, one providing improved track, search, and terrain-clearance radar, plus highly classified missile countermeasure devices. At the same time, some Soviet-supplied SA-2 *Guideline* missiles, used by the enemy, were seen to make radical course deviations after launch, expending their ener-

gy through such maneuvering and falling harmlessly to earth. The *Guideline* is powered by a solid-propellant booster motor which supplies flight energy for a relatively brief period. It responds to surface fire control signals as long as maneuvering energy remains, then assumes a ballistic trajectory.

Advanced equipment capabilities permitted the A-6 and other strike aircraft to approach objectives at higher altitudes, reducing the likelihood of small-caliber hits from the ground. In some cases, A-6 *Intruders* acted as "pathfinders" with flights from Yankee Station ships and filled a target-location role. This left the escorted planes free to concentrate on stores delivery.

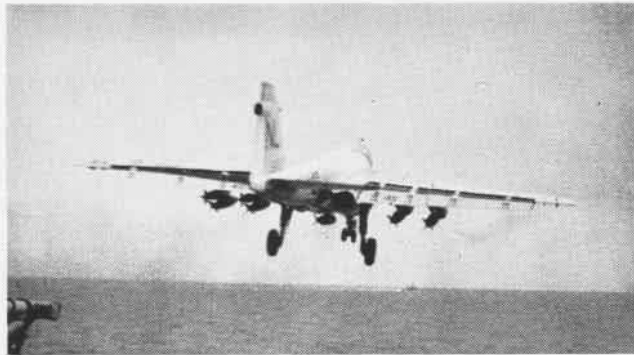
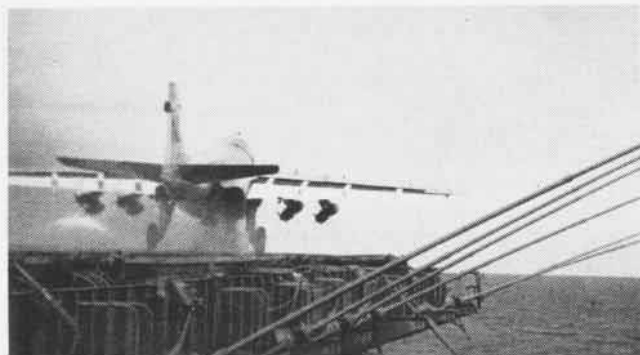
**K**ITTY HAWK aircraft first saw action from Dixie Station, the mobile point off the South Vietnamese coast from which carrier strikes were launched over the Republic. Following the near-slaughter of the ARVN 7th Regiment, *Kitty Hawk's* Air Wing 11 bombed, rocketed and strafed VC positions in the Michelin Plantation, some 45 miles north of Saigon, inflicting heavy casualties and providing relief to beleaguered ground forces.

Moving into the Tonkin Gulf, the wing shifted attention to North Vietnam and in December launched record numbers of strikes. The *Black Falcons' A-6A's* figured prominently in these missions, principally against bridges, vehicular traffic and transportation facilities between the DMZ and the city of Vinh. Other regular targets included ferries and railroad lines near Thanh Hoa as well as the heavily defended Bach Long Island

radar site, 80 miles southeast of Haiphong. These missions took *Kitty Hawk* northward into the Gulf and again placed *Intruders* over the vital Hanoi-Haiphong area.

The third *Intruder* unit checked into Seventh Fleet in June 1966 aboard *Constellation*, relieving *Kitty Hawk* and VA-85 after some six months of almost continuous combat service. The newcomers, VA-65, also hailed from Oceana. They too had seen service with A-1H *Skyraiders* aboard *Intrepid* and *Enterprise* prior to their transition. Developmental difficulties in the highly sophisticated A-6A system, once limiting factors to full aircraft performance, were well on the way to being eliminated in the advanced versions with which VA-65 was equipped. These aircraft, many only in squadron custody for a few weeks, had been extensively modified and were prepared to deal with the improved *Guidelines* on more than equal terms.

VA-65 and her sister squadrons led the attacks with paralyzing strikes on June 27 against oil processing plants and storage areas 35 miles northeast of Vinh. Operating in conjunction with *Ranger's* Air Wing 14 from Yankee Station, pilots reported dense smoke clouds visible from 150 miles away. While *Constellation* aircraft attacked the Do Son facility, *Ranger* squadrons performed similarly in the Haiphong area. These first raids were immediately followed by crippling assaults on strategic fuel reserves 12-15 miles south of Vinh. Post-strike reconnaissance revealed smoke columns 5,000 feet above the city. These sorties were carried out



EVEN DURING THE MONSOON SEASON, ALL-WEATHER A-6A TOOK OFF CATAPULT ON BUSINESS-AS-USUAL BASIS

in conjunction with Air Force F-105 strikes which within several days all but demolished the Hanoi-Haiphong petroleum facilities.

On June 29, *Constellation* and *Ranger* moved far north into the Gulf in preparation for the final stages of a joint operation. Led by *Constellation Intruders*, these wings followed up Air Force strikes with a large-scale onslaught against the Haiphong tank farms which had been receiving oil and gasoline directly from ocean-going tankers. Although the raids had been scheduled at a period when few deep-draft vessels were in the vicinity, the implications were apparent. The prospect of Haiphong harbor being converted into a blazing inferno of ruined piers and warehouse facilities, thus eliminating its use as a key deep-water port, could hardly have a settling effect on the hard-pressed North Vietnamese government. Pilots reported widespread destruction of the main facility, located several miles from the center of Haiphong. The 40 or more large storage tanks clustered at this point reportedly handle 95% of the total petroleum supplies entering North Vietnam. When the dense smoke pall, reaching upward to over 20,000 feet, lifted, reconnaissance photos revealed destruction of almost all of the principal target area. Simultaneous Air Force strikes resulted in a series of holocausts in fuel dumps located directly across the Red River from the center of Hanoi. (CVW-14 and CVW-21 had made earlier strikes, but without A-6's.)

In November and December, 1966, the cycle for the *Intruder* continued as the *Black Falcons* (VA-85) and *Black Panthers* (VA-35) joined the Seventh Fleet in *Kitty Hawk* and *Enterprise*, respectively. With *Kitty Hawk's* arrival, VA-65 returned to the United States aboard *Constellation*. The two "newcomers," VA-85 commencing its second combat tour and VA-35 its first, were the fourth and fifth Navy units to deploy the *Intruder* in action. On approximately November 1, the Marine Corps deployed its first A-6A squadron, VMA(AW)-242, with MAG-11 at Da Nang.

By early December, *Kitty Hawk's* A-6A, F-4B and A-4 aircraft had



AFTER MISSION, A-6A'S FROM ENTERPRISE RETURN TO FLIGHT FORMATION

completed strikes against military targets around the principal North Vietnamese logistic center of Thanh Hoa. A few days later, VA-85 *Intruders* successfully located and attacked a large truck convoy in the vicinity of the Phu Ly railroad bridge, 31 miles south of Hanoi. Making radar-directed approaches, the same squadron severely damaged a *Guideline* assembly depot five miles outside Haiphong on December 12.

In mid-December, VA-35 *Intruders* made their debut in combat, attacking Red coastal targets in the Panhandle region. During part of December and January, Seventh Fleet had two *Intruder* squadrons in action simultaneously. Both *Enterprise* and *Kitty Hawk* air wings systematically directed attention to the now-familiar target areas between Haiphong and Dong Hoi. *Guideline* launching and support sites were hit with increasing frequency, particularly in the Thanh Hoa region.

February 1967 found VA-85 employing radar guidance to bomb effectively the power plants north of Hanoi. These raids were carried out despite extremely poor weather over the target zone. In early March, teamed with *Ticonderoga* and *Bon Homme Richard*, *Kitty Hawk* aircraft again delivered sizable payloads on the Bac Giang power plant, 23 miles northeast of Hanoi. The large Hon Gai power

plant and nearby ammunition dumps were raided for several consecutive days by the *Black Falcons* and other aircraft between March 10 and 15.

On March 16, a single A-6A with Commander R. J. Hays, C.O. of VA-85, and B/N Lt. Ted Been made a very successful night radar attack on the Bac Giang plant. Despite heavy AAA fire and a number of SA-2 firings, Commander Hays was able to deliver over 12,000 pounds of ordnance to his target. During that month, VA-85 also completed a number of sorties against the Thai Nguyen steel plant.

Late in March, the *Black Panthers* returned to the line, and together with the *Falcons*, hit military logistic areas, tank farms and supply dumps northeast of Haiphong. The Thai Nguyen works continued to play host to *Intruders* from both squadrons through the latter days of the month, with much of the effort possible only through use of the potent A-6 avionics system.

*Enterprise*, joined by *Hancock* and *Ticonderoga* at Yankee Station, launched *Intruders* against a wide range of locations around Vinh, Thanh Hoa, Hon Gai and Dong Hoi during the early part of April. VA-35 again bombed the Thai Nguyen plant on April 8. Later in the month, thermal power plants outside Haiphong received

severe damage from VA-85 *Intruders*, as *Kitty Hawk* resumed operations in the Tonkin Gulf.

THE INTRUDER is the result of Navy post-Korea thinking in all-weather, attack aircraft design. Like the F-4 *Phantom II* fighter-bomber and RA-5C *Vigilante* strike-reconnaissance aircraft, the A-6 embodies the "two-man, two-engine" concept. This permits the installation and operation of more complex and accurate electronics packages, fire control radar and countermeasures gear. The addition of a bombardier-navigator permits the pilot to concentrate on his primary function, thereby significantly increasing mission effectiveness. The

added reliability and safety of the second engine are a demonstrated advantage and one of considerable significance when applied to a multimillion dollar vehicle such as the *Intruder*.

The Fleet experience of the A-6 has included its use in all types of adverse weather, at night, in varying degrees of temperature and humidity, at sea with constant salt spray and shipboard handling and during exposure to hostile ground fire and SAM's. The *Intruder* has successfully withstood the tremendous structural loads of repeated catapult launching at high gross weights and the stresses of arrested recoveries.

The A-6A has served as the proto-

type for the carrier-based, medium attack concept. A comparatively new approach, the *Intruder* is directed at closing the operational void between light attack (A-1, A-4, A-7) and heavy attack/reconnaissance (A-3, RA-5C) from the standpoint of range, performance and payload. Its introduction of advanced airborne attack radar and inertial Doppler navigation to a wartime environment has not been without its share of operational "growing pains." Overshadowing these, however, has been its rapid and thorough demonstration of total system efficiency. By its superb performance, the *Intruder* has secured a premanent slot in the United States Navy line-up.

## NIGHT STRIKE FROM THE ENTERPRISE

YOU MAY wonder, as I often wondered, what it's like to fly a combat mission over North Vietnam. It isn't like anything. That's not to say it's like nothing, by any stretch of semantics or imagination. There is simply nothing to which it can be compared. Frightening? Yes. Terrifying? No. Challenging? Definitely.

The tension begins to mount from the moment the target is assigned—sometimes the day before, sometimes earlier, sometimes at the last minute. For the first few strikes, we all flew the entire flight a thousand times before we climbed into the cockpit. Eventually, we learned to forget the mission except while planning, briefing or flying.

It is now a cliché that anyone who tells you he isn't scared doing this sort of thing is either lying or just plain crazy. Many are fond of saying so, but it doesn't happen to be the truth. There are some (I do not include myself among their small number) who accept death or capture as a possible outcome of each mission, but only on a purely intellectual basis. They design their tactics, as we all do, to minimize that possibility while maximizing the probability of destroying the target. But we can't really consider a man scared unless fear has some effect on him. We are told

By Lt. Robert S. Owen, USN

that fear is an emotion and, as such, manifests itself in psycho-physiological changes in the organism. Many of us see these changes in ourselves daily. Some cannot accept the danger and are forced to ignore it or run away from it. They are in trouble. I get diarrhea, but I get back from my missions. But these fearless ones—nothing. Absolutely no change in their manner or performance.

Aviation is not the sort of occupation that allows a man to conceal inner pressures. A man under real stress usually talks with an abnormally relaxed air; his carrier landings take on more the appearance of an arrival than of an approach. As squadron aviation safety officer, I often use a rather dirty "pressure gauge." I simply observe how hard people laugh at a not-so-funny joke. The higher the pressure, the more boisterous the laugh—to a point. The man who doesn't laugh at all may be in trouble. The fearless ones? Just a polite chuckle befitting the story. I thereby justify my observation that they are consistently among the best in their profession.

The mechanics of a typical mission are surprisingly similar to what you may read in a newspaper

or a book, see on television or at a movie. Briefing time is usually two hours before launch. The strike is completely planned before that but we receive latest weather and intelligence information and provide last-minute data for coordination with support forces. In the ready room, we discuss departure and recovery and suit up for the flight.

There is usually a short wait before the call, "Flight crews, man your aircraft," is sent to all ready rooms. During this period, a psychologist would have a field day observing us. No one behaves exactly the same way each time. Some sit quietly smoking one last cigarette. Others tell jokes (usually quite morbid by your standards) and still others nonchalantly pick up a piece of paper work completely unrelated to the mission.

The mission I am about to describe is one I actually flew. It is not typical of air strikes in North Vietnam, but it is typical if you happen to fly the A-6 *Intruder*. I cannot, of course, describe tactics in detail, since I may wish to use them again. I believe you may, however, get a feeling for the factors that affect a pilot's nerves. The target, which shall remain nameless, is one of the most heavily defended in the world—scores of

automatic weapons and anti-aircraft batteries and a few surface-to-air missiles.

The ride to the flight deck is via the same sort of elevator you might find in an office building back home. The usual elevator small talk is tossed around and perhaps there is a last-minute instruction or agreement between members of a crew.

As we step out onto the flight deck, a misty rain driven by 34 mph winds cools our faces and begins to dampen our clothing. The deck is lighted by an eerie moon-glow of red lights, but beyond that there is only the pitch-black darkness of a night conjured up by the devil especially for carrier-based aviators. Our aircraft, laden with more than 20 500-lb. bombs, presents a silhouette which immediately sets aside any comparisons I might make between this mission and the hundreds of training flights that were intended to prepare me for it.

I am greeted by the plane captain, a young man with a grueling job. This is his airplane. When it's aboard ship, he lives with it—cleans it, inspects it, polishes it, inspects it again and sleeps with it. He is justifiably proud of the plane and of himself. When we get it airborne, he'll take a well-deserved break, but I'm sure he'll stop long enough to say a prayer for us.

As I walk around the aircraft for preflight inspection, the ordnancemen are completing the fusing of the bombs. All four A-6's on this launch have been loaded within the past hour with the same bomb load as mine—more than 80 500's, all loaded by hand by ten men. Like the plane captain, the ordnancemen work from 14 to 20 hours a day and, like you and me, they get tired. But they're proud of the job they're doing and they do it well. Men such as these are winning the war for us.

When at last I climb into the cockpit, my bombardier/navigator is already strapped in and is busily aligning his inertial platform. He's Ltjg. Bruce Borchers, and, as you will see, he's easily the coolest man in the world. The training of these men parallels that of the pilot but emphasizes technology. The weapon system belongs to them. Al-



CONSTANT ATTENTION TO DETAIL KEEPS GRUMMAN A-6A'S READY TO GO

though some say a monkey could run an A-6 system as long as everything works, when a component fails, immediate response by a highly skilled operator is required to complete the mission.

With almost no time for thought, the engines are running, the system is checked out and we're taxiing onto the catapult. Troubleshooters give us a careful check and the catapult officer is waving his green wand back and forth in a slow, rhythmic movement. "Take-off check list complete. All set?"

I switch the external lights on and wait. The green wand moves slowly down until it touches the deck. We are slammed back against the seat until the aircraft has accelerated from zero to 140 mph, into a huge wet ink bottle. "Wheels up and we're climbing . . . 170, flaps up . . . looks good."

It's all business and no time to think. System updated and checked out. Airplane's in good shape. Coast-in in five minutes. There's an entire fleet out here just so we can get those bombs on the target.



A-6A IS ARMED FOR THE ATTACK

Everything we miss will move further south tomorrow—that much closer to the Marines. The 5,000 aboard *Enterprise* are depending on us to make their separations from families and their back-breaking efforts worthwhile. Everything inside me is against going in but we're just part of a giant machine now.

Coast-in. Bruce says calmly, "Feet dry." "Rodge." The enemy knows we're here and he's tracking us, but he can't lay anything on us . . . yet. My throat is awfully dry as I bank hard toward the target. I wish for 800 knots. There's Bruce again: "I have the target." Suddenly the sky lights up like daylight. "Roger, target." I glance at him. His features are clear in the flickering light of anti-aircraft artillery. Believe me, his expression is blank—pure concentration on the radar scope. "In attack." He sounds as though he's on a training mission. "Roger in attack in range. Committed. Let's make it a good one, Babe."

As we approach the target, the flak gets more intense. Suddenly, this monster I'm herding around begins to shudder and shake like a toy in a storm. The 85's are on us, but there's just a second to go to release. Bombs away, and I break out so hard we nearly stall. They're not so close now, but still shooting. "Which way out?" I glance at Bruce. He's quietly typing away on his computer keyboard, as a bright orange glow from our bombs illuminates the cockpit. The run is over. "Take steering."

After what seems an eternity but is actually a matter of minutes, we cross the coast. Happiness is feet wet. If there is one definite border in this confusing war, it is the coastline of North Vietnam. The enemy owns every foot of sand along the beach, but the U.S. Navy owns the salt water.

As we run like a deer with beau-

tiful black water below us and no more fire in the sky, all the tension that's been mounting since noon the day before vanishes before the most complete state of relaxation achieved in months. I remove my right glove and reach to shake the hand of the man I've just been through hell with. Scarcely a word is spoken between us un-

til we're back to debriefing. I can well remember when a night carrier landing in the rain was the most tension-filled moment in the week. I remember nothing at all about this one.

Certainly, we'll do it again tomorrow night, but after a quick breakfast we'll sleep a long and beautiful sleep.

## INTRUDER BASE AT WHIDBEY ISLAND

THREE GRUMANN A-6A *Intruders* landed at NAS WHIDBEY ISLAND, Wash., August 17, 1966, first of projected multiple squadrons scheduled for the West Coast base.

Escorted by eight *Skywarriors*, the *Intruders* touched down lightly, taxied precisely to position fronting the reviewing stand. The operation was smooth, but the impact of these Grummans on three separate groups couldn't have been greater if they'd cut loose their missiles right there.

The Pacific Fleet, NAS WHIDBEY, the nearby town of Oak Harbor—all would "feel" the arrival of these new, glistening aircraft in months and years to come. To all groups, the A-6A program at Whidbey means higher efficiency, intensive training, more work, growth and improvement. Sort of beginning again.

To Pacific Fleet carrier forces, the A-6A program at Whidbey meant that operational *Intruder* squadrons would deploy directly from the West Coast, beginning

sometime the middle of this year.

The *Intruders* that have served in southeast Asia with the Seventh Fleet were transferred from Atlantic coast training bases, mainly, NAS OCEANA, Virginia Beach, Va. Beefing up Whidbey's role as Pacific support base, VA-196, after completing training in the *Intruder* at Oceana, was transferred to Whidbey in November.

Actual training of air and ground crews in the A-6A program at Whidbey is administered by Heavy Attack Squadron 123, commanded by Commander John L. Underwood. The squadron has extensive experience in training procedures, having been involved in the A-3 *Skywarrior* program for nine years. Its personnel are experts in their line.

VAH-123 was commissioned as Heavy Attack Training Unit, Pacific (HATUPAC), at San Diego in 1957 as a transitional training squadron for the shift from A-1J *Sav-*

age prop planes to the jet-powered *Skywarriors*. It was moved to NAS WHIDBEY as part of Heavy Attack Wing Two.

Becoming VAH-123 in June 1959, the squadron was part of Replacement Carrier Air Wing 12. Its primary mission was training Pacific Fleet units in the A-3.

First Fleet squadron at Whidbey making the transition is VA-165. After completing its training by VAH-123, the squadron will take delivery of new *Intruders* and become an operational Fleet squadron, home-based at Whidbey.

Successive trainee squadrons will follow as fast as they can be accommodated. About eight squadrons and 80 *Intruder* aircraft will round out the program sometime in 1969.

The training syllabus for A-6A personnel includes celestial and dead reckoning navigation, mission planning, radar navigation and bombing, special weapons employment and bombing, and day and night carrier qualifications.



WHIDBEY A-6A'S BEAR THE DISTINCTIVE RED TAIL MARKINGS OF VAH-123, THE REPLACEMENT TRAINING SQUADRON

# HELICOPTER LANDING SYSTEM TRIED

By Lt. R. J. Touhey

THE INCREASED use of helicopters operating from aboard destroyers has yielded great advantages — increased sonar search coverage, decreased time in arriving at a datum once a submarine contact is achieved and a relatively invulnerable system for locating and destroying enemy submarines, and fast underway replenishment.

But a great disadvantage mars the helicopter-destroyer combination: the critical landing phase of the operation. Heavy sea states mean a pitching, rolling deck and preclude consistently safe landings.

In recent years, Experimental Squadron Ten of the Royal Canadian Navy, in conjunction with Fairey, Ltd. of Canada, has developed a helicopter Rapid Hauldown and Secure System (RHSS) for use primarily aboard non-aviation ships. This system provides:

1. Assistance to the pilot in the landing phase between a hover and helo touchdown.
2. A positive and safe means of securing the helicopter to the deck after landing.
3. A mechanical handling feature to allow positioning of the helicopter for storage on an elevator or in a hangar to minimize the corrosive effects of the salt water environment.

Recently, a project pilot from Naval Air Test Center, Patuxent River, participated in indoctrination flights with the Royal Canadian Navy at Shearwater Naval Air Station, Halifax, Nova Scotia.

Additionally, the U. S. Navy has purchased one system to be installed on board the USS *Catskill* (MCS-1), now being completed in New Orleans. Present planning does not include installation of the traverse portion of the hauldown system on the *Catskill*.

When the ship is ready for sea later this year, a Navy evaluation of the system will be undertaken. The aircraft to be used in the trials conducted by the Flight Test Division of NATC PATUXENT RIVER, Md., is a Sikorsky H-3, modified to meet the system's requirements.



HELO LANDING ABOARD SHIP IS ASSISTED BY RAPID HAULDOWN SYSTEM

The H-3 will have an internally installed hydraulic messenger winch which can lower a cable through a hollow steel probe attached to the underside of the helicopter below the center of gravity. A retractable tail probe allows two-point securing of the helicopter to preclude lateral motion when on deck. A control panel is provided with which to extend and retract the main probe, tail probe and the messenger cable. Lights on the cockpit control panel indicate positions of the main probe, tail probe, and of the messenger winch as well as cable engagement.

When the RHSS is installed aboard ship, VX-10 will flight-test it. Once the cable is attached to the helicopter, a landing signal officer (LSO) controls the tension in the hauldown cable, through a console. The LSO additionally acts as primary control for all helicopter rotor engagements, takeoffs and landings.

A typical H-3 recovery operation utilizing the RHSS starts as the helicopter slowly approaches the fantail of the recovery vessel. A messenger cable, lowered from the underside of the aircraft through the hollow steel main probe, is re-

trieved by deck personnel and attached to the hauldown cable. The messenger cable is retracted by the pilot on signal from the LSO, and the hauldown cable end fitting locks into the main probe. Once tension is applied by the LSO, the messenger cable will separate from the hauldown cable end fitting, leaving the hauldown cable locked into the main probe. In an emergency, the pilot can separate the hauldown cable from the helicopter's main probe either electrohydraulically or manually. In addition a shear pin in the cable will allow cable and helicopter separation when cable tension exceeds the design load limit.

Once "hooked up," the pilot requests hover tension and the LSO increases cable tension to 1,500 lbs. The additional power required to maintain a hover is small (5-7%). When the pilot states he is "ready for landing," the LSO increases the cable tension to 3,000 or 4,000 lbs. and the pilot maintains the power required when the tension was 1,500 lbs. The tension differential results in the helo's descending at two to three feet per second.

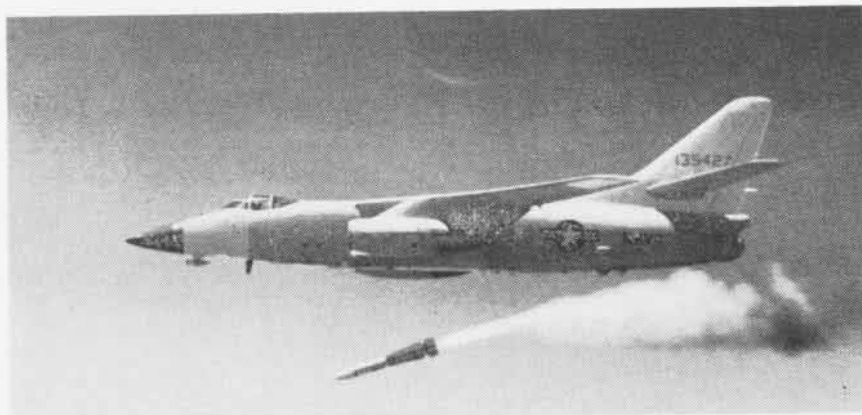
An increase in rate of descent to

six feet per second may be achieved by lowering the collective slightly. Rate of descent is determined by the deck conditions, the more severe conditions requiring the higher rate of descent. The actual landing is still controlled by the pilot, but the timing for the landing is controlled by the LSO who determines the moment at which to increase cable tension. This would normally be done as the ship is rolling level. Such a landing substantially reduces pilot effort over that required without the system.

The pilot maintains a level attitude over the landing spot receiving his "cues" both from the gyro-stabilized horizon bars in front of him on the ship as well as audio cues from the LSO. The landing requires the pilot to place the main probe of the aircraft in the "bear trap" on the deck. At this time, the LSO pneumatically fires the locking bars of the bear trap and the helicopter is so secured to the deck as to resist all longitudinal, lateral and vertical motion. The bear trap is six feet square, the center of which is the source hole for the hauldown cable. The increased damping provided by cable tension substantially aids the pilot during hover and landing so that landing with the main probe within the bear trap is not a problem.

The system is designed to compensate for sea states resulting in deck oscillations of 8° in pitch and 31° in roll. Once secured to the deck the helicopter may be shut down when conditions permit. By use of the traverse function of the system, the helicopter may then be moved for deck spotting or into a hangar provided for protection from the weather.

In Canada, Experimental Squadron Ten has completed over 400 shipboard landings in more than 150 hours of flight-testing the system. Every possible combination of CG location and gross weight was investigated, as well as automatic stabilization equipment (ASE) off landings, and auxiliary and primary servo systems off landings. No adverse conditions were noted. System discrepancies were evaluated and rectified as they appeared. The result is a safe, efficient, and operational system now being used in the Royal Canadian Navy.



PHOENIX LAUNCHED FROM A-3A SKYWARRIOR CONTINUES ON OWN POWER

## PHOENIX' FIRST LAUNCH FROM F-111B

A MAJOR milestone in the F-111B/*Phoenix* program was reached recently with the first launch of a guided *Phoenix* missile from an F-111B interceptor off the California coast.

The *Phoenix* system located a small jet target drone on radar, locked on and scored a hit. The operation, which met all test objectives, was directed by the Naval Missile Center, Point Mugu, in cooperation with Hughes Aircraft.

The launch demonstrated the successful integration of the *Phoenix* with the F-111B aircraft. In previous firings, the *Phoenix* missile had been launched from an A-3A *Skywarrior* equipped as a *Phoenix* test bed.

The *Phoenix* missile system is a long-range fire control and armament system consisting of the AWG-9 Airborne Missile Control System (AMCS), the missile launchers and the AIM-54A *Phoenix* missile. It is designed to provide Fleet air defense as well as to maintain air superiority over distant objective areas.

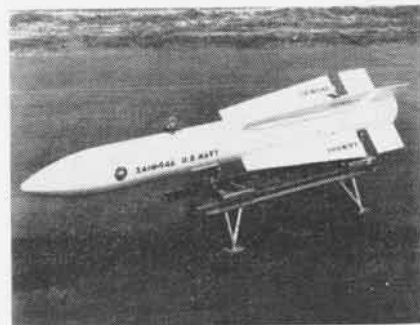
For on-board target acquisition, the AMCS includes a long-range, high-power pulse Doppler radar. This system's "look down" capability enables it to pick moving targets out of the ground clutter that normally obscures targets on a conventional radar.

In addition to its long range, the AMCS will introduce into the Fleet for the first time in an aircraft the ability to track many targets at

once, with a computer-aided selection of target priority. The system makes possible virtually simultaneous launch and simultaneous guidance of several missiles against separate targets, something that is not possible with other systems.

The radar antenna, a planar array, represents a significant step forward in antenna design. It is the largest circular antenna ever built for airborne operations, with a high aperture efficiency that results in increased radar range.

The long range capability of the *Phoenix* missile system, above that of any other air-to-air guided weapon, in combination with the ability of the F-111B to maintain station at very long distances from its parent carrier, will enable the missile to intercept enemy aircraft well outside the range at which they could launch stand-off weapons at the Fleet. The F-111B/*Phoenix* weapon system will also be coupled to the Navy's tactical data and aircraft identification (IFF).



AIM-54A PHOENIX RESTS ON STAND

# A GALLERY OF 'ACTION AVIATORS'

ON THE FIRST attack, they came from three carriers and pounded the railroad yards at Thanh Hoa. In the second strike they added the railroad bridge and got it, too. On the same day, the release says, "In other action today, aircraft from VA-192 [flew] against the Cau Dong highway bridge and a large group of 50-foot barges. The center section of the bridge and two barges were destroyed; four other barges were damaged." It was all in a day's work.

Day after day and strike after strike, these Naval Aviators fly for the Navy where the action is.

In the attacks described above, they came from USS *Enterprise* (CVAN-65), USS *Kitty Hawk* (CVA-63) and USS *Ticonderoga* (CVA-14) with their embarked Air Wings 9, 11 and 19, respectively.

**ENTERPRISE:** In the first attack, Commander Peter W. Sherman, executive officer of VA-56, led a flight of A-4's into the target area. The *Big E's* other *Skyhawk* squadron, VA-113, followed VA-56 in on the target, led by their executive officer, Commander Andy Burnett. Many of the *Skyhawks* carried more than their own weight in ordnance and fuel. The F-4 *Phantom* pilots

from Fighter Squadrons 92 and 96 flew their fighter bombers over the target area in both bombing and flak suppression strikes. The VF-92 contingent was led by Commander Schenck Remsen, executive officer; Commander Sheldon Schwartz, commanding officer of VF-96, led that squadron's aircraft. VA-35 joined the rest with their A-6 *Intruders*. VA-56, commanded by Commander C. Ray Smith, led the second *Big E* strike. VA-113 and other supporting squadrons that make up Air Wing Nine went along.

**KITTY HAWK:** A-4C *Skyhawks*, F-4B *Phantoms* and A-6A *Intruders* of Carrier Air Wing 11 moved against the same target. *Phantoms* from VF-213, led by Commander G. H. Barkalow, flew against the target. Taking part in the same strike with VF-213 were Attack Squadrons 85 and 112. VF-114 blitzed antiaircraft emplacements in the railroad yards as Commander Dick Powell, commanding officer of VA-144, led the combined strike. The VA-112 group also belted the Thien Linh Dong railroad bridge five miles south of Thanh Hoa.

**TICONDEROGA:** Commander Chuck Hathaway led six flights of aircraft

from Air Wing 19 against the complex as part of the strike by the three Yankee Team carriers. The first two A-4 *Skyhawks* "walked" their bombs right through the railroad tracks, according to LCdr. Ted Reynolds, and CAG-19, Commander Billy Phillips, radioed, "You'd better drop somewhere else; that target's gone." Other squadrons from *Tico* participating in the strike included VA-192, led by LCdr. Gary Scoffield, VA-195, VF-191 and VF-194. And on the same runs a total of three flak sites were damaged and A-1's from VA-52 damaged nine cargo barges on inland waterways just north of the demilitarized zone.

THIS KIND of action leads to many ceremonies such as the one that took place recently on USS *Ticonderoga*. Among the awards handed out were two Silver Stars, four Distinguished Flying Crosses, 100 Air Medals, 15 Navy Commendation Medals, three Secretary of the Navy Commendations for Achievement, one Purple Heart and one CinCPacFlt Commendation.

These are some of the men who received the awards:

Commander Phillips received the Silver Star Medal for action in De-



CDR. BILLY PHILLIPS, CAG-19



LCDR. R. L. KIEHL, VA-195



COMMANDER ERNEST M. MOORE



LT. J. H. SPRINGER, VA-195



CDR. HANK URBAN, CAG-11



CDR. P. W. SHERMAN, VA-56

ember. He was decorated for his skill in leading an air strike force intact through intense antiaircraft fire to bomb large vehicle stores at Vin Dinh. Commander Phillips received his second Air Medal and the Navy Commendation Medal in the same ceremony.

Commander Ernest M. Moore was also awarded the Silver Star Medal for "evading eight surface-to-air (SAM) missiles and neutralizing two SAM sites" during the

same strike at Vin Dinh. He also received the Distinguished Flying Cross and his seventh Air Medal for previous strikes.

Others receiving DFC's were VA-195 skipper, Commander Charles Hathaway (his second), LCdr. Thomas G. Moore and Lt. Judson Springer, VA-192, and LCdr. Richard L. Kiehl, VA-195.

The awards were presented by Rear Admiral Thomas J. Walker, at that time ComCarDiv Three.



CDR. DICK POWELL, VA-144



LCDR. E. W. FOOTE, VA-35



CDR. C. E. HATHAWAY, VA-195

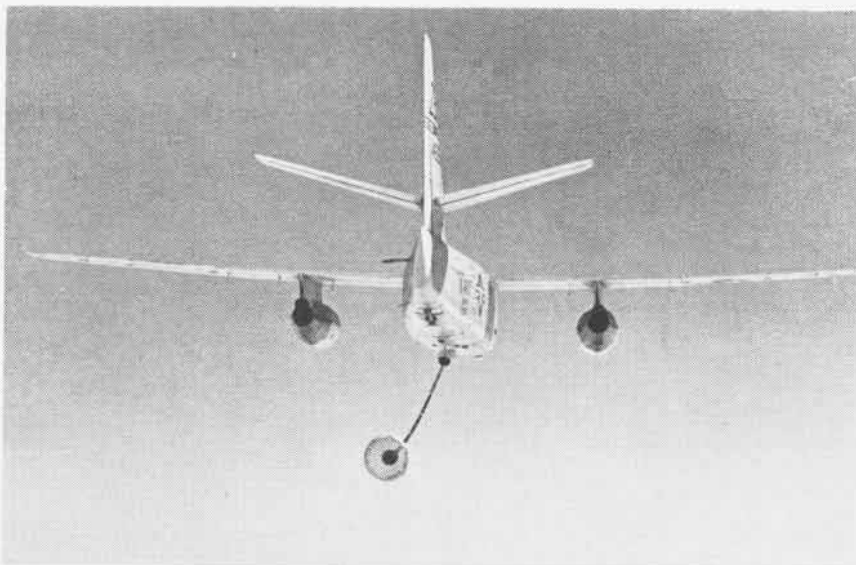


CDR. C. R. SMITH, VA-56

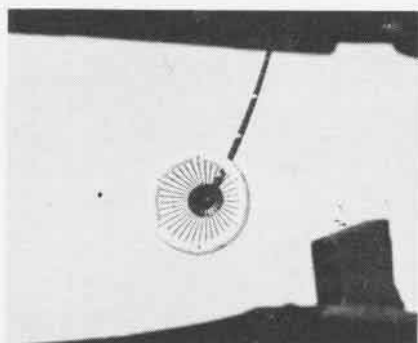
# RENDEZVOUS ABOVE THE SEA

By JOC Jim Falk

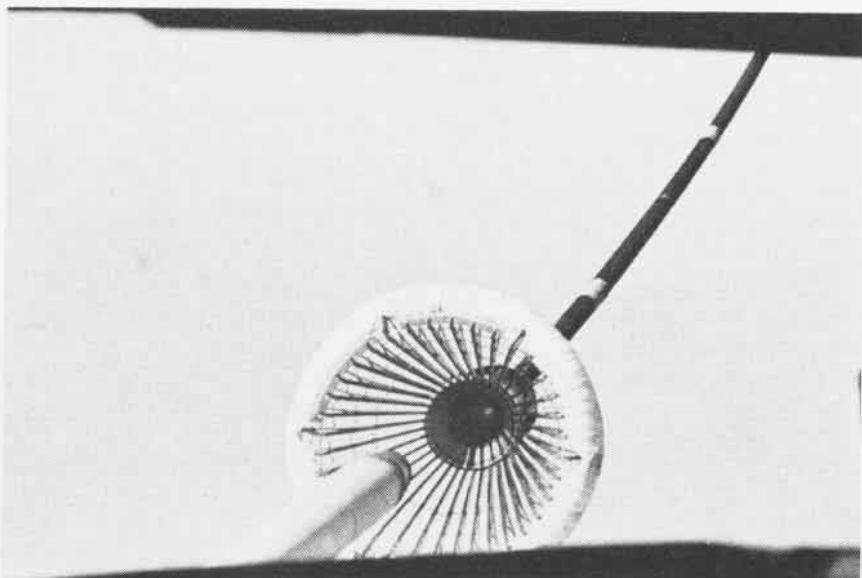
These pictures of the inflight refueling procedure between Skywarriors were taken by Vice Admiral John J. Hyland, Commander Seventh Fleet, when he flew as an observer on an operational flight in WestPac. With every strike staged from the Fleet's Attack Carrier Striking Force in the Tonkin Gulf, tankers are also launched to provide inflight refueling. Thus range, ordnance loads and flying time of bombers and fighters increased.



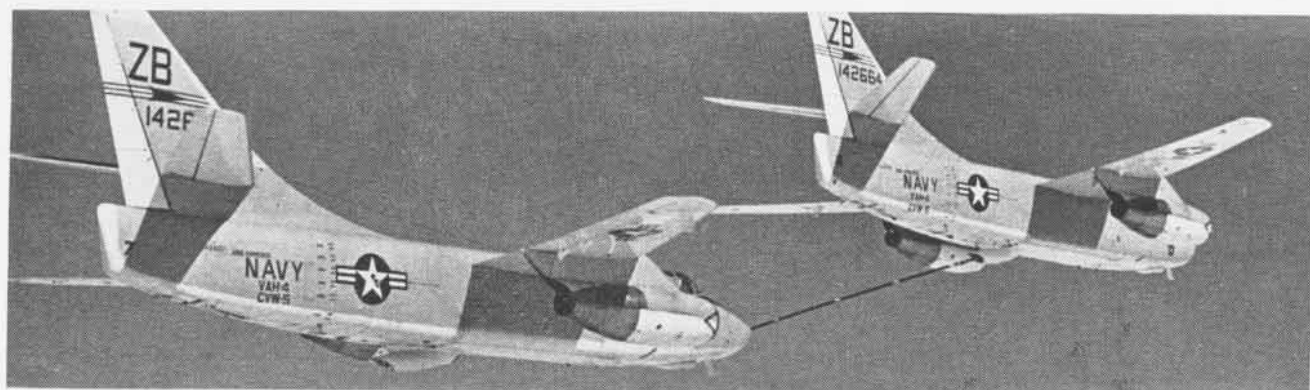
CUSTOMER AIRCRAFT APPROACHES AS TANKER EXTENDS REFUELING HOSE



FUEL HOSE BASKET IS NOW READY



AIRCRAFT INCHES ITS REFUELING NOZZLE INTO THE FUEL LINE BASKET



AT MORE THAN 400 GALLONS PER MINUTE, AN A-3B TANKER FROM USS HANCOCK REFUELS ANOTHER SKYWARRIOR

# TRAINING A TONKIN GULF LIFESAVER

By Ltjg. Ben Marshall

In the March 1967 issue, NANEWS presented the story of a typical search-and-rescue (SAR) mission as it might be performed any day in the Gulf of Tonkin. The following article provides some insight into the training a potential SAR pilot receives before he is ready to join Seventh Fleet units. The story also tells something of the type of man chosen to perform this mission.

WHO WOULD fly a helicopter treetop-high into North Vietnam or hover 20 feet above the Gulf of Tonkin, surrounded by enemy fishing junks, to rescue a pilot shot down during a mission over enemy territory?

Ltjg. Bob Parkinson would.

Why? "I guess I'm more interested in saving lives than in taking them," this 24-year-old Naval Aviator said recently.

A former pre-medical student at Dartmouth College, Ltjg. Parkinson trained for two years to qualify as a Navy pilot. But he became qualified for search-and-rescue work during a four-month period of arduous training conducted by his parent command, Helicopter Combat Support Squadron (HC) One. The squadron is based at Ream Field, which is a helicopter air-

field near Imperial Beach, Calif.

The son of Mr. and Mrs. Bernard Parkinson of Mount Vernon, Wash., Ltjg. Parkinson enlisted in the Navy after graduating from Dartmouth with a Bachelor of Science degree in Biology.

He reported to Officer Candidate School, Newport, R.I., October 24, 1964, and was commissioned an ensign March 5, 1965. His next stop was NAS PENSACOLA, Fla., where he started flight training. He also married a Pensacola girl, the former Patti Canterbury.

With basic training completed, including flights in the T-34 *Mentor* and the T-28 *Trojan*, he was sent to Ellyson Field to qualify in helicopters. At Ellyson, he flew the TH-13 *Sioux* and advanced to the H-34 *Seahorse*.

The potential SAR pilot reported to HC-1 June 28, 1966. Before he was ready to pilot a squadron helicopter on an actual mission, however, the Navy spent an additional \$12,000 on him for still more training.

During his 16 weeks of instruction with HC-1, Ltjg. Parkinson learned to fly an H-2 *Seasprite* in

daylight and darkness, over land and water.

He worked several weeks with a crew chief (the senior enlisted crewman aboard the helo), learning to maneuver the H-2's hydraulic-powered rescue sling over the head and shoulders of men on the ground.

The crew chief, operating the sling from the helo's hatch, taught Ltjg. Parkinson to respond to pressure on his shoulder: To move the ship forward, the crew chief would press forward on the pilot's shoulder. Similar signals from the senior enlisted man indicated he wanted the helicopter raised, lowered or moved sideways.

Ltjg. Parkinson learned that the objective was to drop the sling directly onto the man on the ground. An injured pilot, either on land or in the water, would not be able to move far to reach the sling.

Long missions taught the pilot how to find his way, using geographical land references. During over-water hops, he practiced hovering the *Seasprite* just 20 feet above the Pacific while a man was pulled out of the water. He simulated the same procedure over water at night.

"The over-water hover on a dark night is the greatest 'vertigo-in-

Photos by JOC Robert D. Moeser



AS HIS WIFE PATTI LOOKS ON, LTJG. PARKINSON STUDIES AT HOME



IN THE COCKPIT OF AN HC-1 HELO

ducer' in the world," Ltjg. Parkinson said later. "Without moonlight, there is no horizon to use as a reference and I had to rely entirely on my instruments. I couldn't tell how high I was above the water without looking at the altimeter, and there's not much room for error at 20 feet."

The young, crew-cut pilot also flew a mission at sea, operating from the guided missile frigate USS *Mahan*. He explained how his small helo must approach the ship with the wind 30 degrees off the bow; this maneuver eliminates wind turbulence normally caused by the superstructure.

"Each time I went down for a landing, I was thinking I'd be sick," he said. "That ship didn't rock like the helicopter."

Ltjg. Parkinson's SAR training also taught him how to save his own life as well as that of other pilots. As a graduate of the rigorous Survival, Evasion, Resistance and Escape (SERE) courses conducted in southern California for all combat pilots, he found he knew how to react if he were shot down during a rescue mission.

The four-phase SERE program took him to Camp Pendleton and Warner Springs, Calif., and included additional instruction at Ream Field. The intensive course taught him how to protect himself and what to expect if he were captured.

At a nearby Marine Corps range, he learned how to use the pilot's principal defensive weapon, the Smith and Wesson 38-caliber revolver.

"The enemy knows the range



**CREWMEN JOIN IN SLING PRACTICE**

of the weapon is not great," Ltjg. Parkinson explained, "so he wouldn't hesitate to charge up close if I got shot down. We were taught how to hit targets at longer ranges by bracing the gun with both hands or against a firm object."

At counterinsurgency school at Camp Pendleton, he received lectures and training with weapons the pilot would likely find in North or South Vietnam. Some of them included the 45-caliber pistol, the 12-gauge shotgun and light and heavy machine guns and mortars.

He learned how to field-strip and fire each of the weapons.

The course also included practice with dummy and live hand grenades and demonstrations of

the kind of booby traps planted by the Vietcong and North Vietnamese.

"I found I have no fear of firearms, even though I'd never used them before," Ltjg. Parkinson said. "Now I know they could save my life."

His SERE training showed him how to live without food and water in enemy territory. At survival school in Warner Springs, he gained first-hand experience in the mental and physical problems prisoners of the Vietcong and North Vietnamese can encounter. No effort was spared to make this part of the program as realistic as possible. It was rugged.

Ltjg. Parkinson completed SERE training at Ream Field. He learned how to repel attackers during a 14-day, hand-to-hand combat course. The fundamentals of judo and karate and the use of hand-to-hand weapons were drilled into him by HC-1 instructors.

Before he graduated from the course, the pilot could scale a 30-foot line in ten seconds. Oriental calisthenics and exercises with "pungi sticks" toughened his body. This particular exercise is designed to build the men's stamina. There were daily two-mile runs along the Ream Field flight line; long hikes were frequent.

Finally, the training was over. Ltjg. Parkinson was ready to head west, to the Gulf of Tonkin. And he was confident of his ability. "When I get to the Tonkin Gulf, my main concern, aside from saving others, will be to save myself. I'm confident now that I can do that, thanks to these last 16 weeks."



**INSTRUCTOR SIGNS A YELLOW SHEET**



**'PUNGI STICKS' BUILD STAMINA**



**PARKINSON INSPECTS ROTOR BLADES**



TRAINING INCLUDED PISTOL FIRING



STUDENTS RUN A TOUGH TWO MILES



HAND WEAPONS ARE EXPLAINED

## A DETACHMENT SAVES A LIFE

By JOSA B. L. Spigener

When they deployed to duty in the Gulf of Tonkin aboard the guided missile frigate USS *King*, Ltjg. Bob Parkinson and the rest of HC-1's Detachment Five personnel soon proved their worth.

On their first SAR attempt, they saved Ltjg. W. H. (Bill) Natter, Jr.

Ltjg. Natter was piloting an aircraft off the carrier USS *Ticonderoga* on a routine mission of searching for barges in the Tonkin Gulf. The pilot found some barges but, during a run on the target, his plane came up crippled. As smoke filled his cockpit, he requested permission from his flight leader to ditch the aircraft.

Aboard *King*, the Det. 5 pilot, LCdr. M. T. LeGare heard the word passed over the IMC: "Helo launch condition one." Less than five minutes later, the *Seasprite* was airborne. Besides LCdr. LeGare, it contained Ltjg. Parkinson as copilot and crewmen AMS2 Loren Hammon and ADJ3 Donald D. Cogger.

By the time 20 minutes had passed, the *Seasprite* was only a few hundred yards away from Ltjg. Natter, who had left his ditched and sinking plane to enter his life raft. The uninjured pilot was hoisted aboard the helo, and Det. Five's first rescue attempt was a monumental success.



A HIKE IN THE DUSTY COUNTRYSIDE



JUDO IS TAUGHT AT REAM FIELD—THE HARD WAY



AT CAMP PENDLETON, PARKINSON THROWS A GRENADE

# SAR PRACTICE HELICOPTER

## HC-1 TRAINS PILOTS

*Photographed by*

Navy and Air Force pilots flying air strikes over Vietnam are often downed by ground fire, missiles or enemy fighters. To save them, they can make it past the coastline, where they can be rescued. This is sound; SAR as practiced in Vietnam is saving many lives. Some \$12,000 and 16 weeks' training go into making a pilot survive. Conducted basic training in a variety of aircraft. Conducted of men who will become helicopter lifesavers is e



'RESCUE' MISSION STARTS AS A HELO HOVERS



'DOWNED PILOT' STARTS THE SHORT TRIP UP



RIDE ALMOST OVER, PILOT NEARS HELO HATCH



STUDENT SAR PILOT TAKES HELO FOR TRAINING FLIGHT

# PS MAKE PERFECT

## IN RESCUE METHODS

OC Robert D. Moeser

am are told to 'head for the sea' if their aircraft are damaged. The logic is that pilots will stand a better chance of rescue if more easily picked up by Navy SAR helicopters. The logic is that pilots from capture or death than in any previous war. In SAR pilot out of a Naval Aviator who has already retrained by Helicopter Combat Support Squadron One, the training is simplified by such operations as are pictured on these pages.



SAR TRAINEE PRACTICES SMALL-DECK LANDING



RESCUE SLING IS OPERATED THROUGH 'FISHPOLE' BOOM



CREWMAN IS LOWERED TO THE SHIP'S HELO PAD



DIRECTOR SIGNALS HELO'S POSITION TO PILOT



as pilots and Machinist Mates were to be trained in maintenance and overhaul duty, but they ended up as Observers, Machine Gunners and Bombardiers in everybody's army or navy. They became the First Aeronautic Detachment of the United States Navy.

In a few days, the outfit was split up. We shoved off for duty aboard two Navy colliers, the USS *Jupiter* (later the first U.S. aircraft carrier, the *Langley*) at Hoboken and the USS *Neptune* at Baltimore.

I reported to the latter in Baltimore where we loaded grain and flour for a week. Then we shoved off for Norfolk and additional supplies and sailed for France with the destroyers, USS *Perkins* and USS *Jarvis*, as escorts. After a 12-day crossing, we landed in St. Nazaire, France, on June 8, 1917. (The first echelon in the *Jupiter* had arrived three days earlier, on June 5.) Our commanding officer was Lt. Kenneth Whiting, USN.

After we arrived in France, nobody knew what to do with us. Lt. Whiting rushed off to Paris to see the American Ambassador, the Naval Attache, the French Minister of Marine and a few others. There was a conference in Paris. It was agreed that the French would train us. They would supply us with airplanes, motors, instruments, armament, bombs and accessories—in which the United States was woefully lacking—and construct three air stations for us while we were in training.

In a few days, we shoved off for

Brest, then to a small fishing village near the entrance of the Bay of Brest, and took over barracks that were once used by Napoleon's troops. We had to wait until the class of French students at the flying school at Tours had finished training. This took about ten days.

One rainy night we arrived at Tours. We were loaded into trucks and driven to the *Ecole d'Aviation Militaire de Tours* and began flight training on June 21.

None of us had had any ground school instruction and few of us had any idea about the theory of flight. Our instructors did not speak English and we did not speak French. We were divided into small groups of eight or ten students, each group assigned to an instructor. One leather flying coat, one pair of goggles and one crash helmet were issued to each group and these were passed from one student to another as his turn came to fly.

The plane used for our primary instruction was the Caudron G-3, a French biplane with warping wings and a two-place cockpit, powered by a 90-hp Anzani or LeRhône engine. The instructor sat in the rear cockpit. After takeoff, he would turn controls over to the student and instructions would begin. If the nose was too high, the instructor would push forward on your helmet. If it was low, he would pull back on the helmet. If the left wing was down, he'd tap on the right shoulder; right wing down, tap on the left shoulder.

A flight lasted about 20 minutes.

After each flight, the instructor would pull out a pasteboard card with a line drawn down the center. One side was written in English and the other in French. The instructor would explain all the mistakes you had made while in flight. He gave you hell in French while pointing to the English translation. Perhaps it was just as well we did not understand his words.

One day an amusing conversation with a French student took place. Our instructor, Benaush, who was in charge of the class in dead stick landings on a spot from 2,000 meters, was very excitable and emotional. At these times, he would shout and scream at a student who was doing something wrong in the air, throw his hat and cane and anything within reach. The French student explained, "Benaush is good pilot. He knows everything student does wrong. When he does, he will throw away his hat. If he is getting in worse trouble, he will throw away his cane. And if at last he throws away his pipe, the man is dead."

I think about two-thirds of our group of 50 students qualified to solo under these adverse conditions, and each one did so in less than five hours of dual instruction, which is an indication of the ingenuity of American youth.

The course at Tours included a cross-country flight to Vendome, to a British flight school about 80 miles distant and return, a spot landing from 4,000 feet with dead



AVIATORS MCGUIRK AND CLINE



PILOTS WERE TRAINED IN FRENCH 'CAUDRON' BY FRENCH INSTRUCTORS

stick on a small field we called the salad patch and an altitude test to 8,000 feet where we were required to stay for one hour.

We were then sent to *Ecole d'Aviation Maritime de Hourtin* on a small lake outside Bordeaux. This was a French Navy Base where we were to receive our preliminary seaplane training. Our instructors were French non-commissioned officers, also non-English speaking.

There were no barracks available, so we pitched tents among the scrub pine woods on the shore of the lake. Our three mess boys cooked our meals, consisting of French rations in the French galley with a choice of red or white wine. Our mess hall was the outdoors under the pine trees; our table, boards placed on empty gas drums. Like all youngsters, we thought this was a great way to fight a war. Our skipper was Lt. Virgil Griffin, USN. In a few days we were joined by Ens. Artemus Gates, USNR, of the Yale unit.

The planes were seaplanes of the F.B.A. (Franco-British Aviation) type, a biplane pusher, powered by a 90-hp rotary engine. After three hops with an instructor for about 15 minutes each, I soloed this little boat and found quite a difference between landplanes and seaplanes. It was much more difficult to gauge distance when landing on smooth water.

After a month at Hourtin, we were sent to *Ecole d'Aviation de St. Raphael*, in the south of France on the Mediterranean. This was the Pensacola of the French Navy. Ens. Gates was in charge of our first group, and Lt. Grattan Dichman was skipper of the American students. Here we started right in flying all types of French seaplanes—F.B.A., Tellier, Salmsons and Donnet-Denhaut (DD)—completing the course in altitude tests, rough water landings, bombing and gunnery.

On October 17, 1917, I received my French Brevet, Number 346. My total flight time, including Tours, Hourtin and St. Raphael, was 31 hours and 52 minutes. I was ready for war, still a Landsman for Quartermaster; pay \$17.60 a month.

Many of the Quartermasters who

did not complete flight training and most of the Machinist Mates were sent to the French Army School of Aerial Gunnery at Caseaux to be trained as observers. Other members of the detachment were scattered all over Europe that summer. Some were sent to our station at Bolsena, Italy, for training with the Italian Navy. On receiving their Italian Navy wings, they were assigned to NAS PORTO CORSINI. Lt. W. B. Haviland commanding.

It was from this station that Haze Hammann of the Baltimore gang put his name on the honor roll with his daring rescue of a fellow pilot under attack by Austrian aircraft off the naval base of Pola. They gave him the Medal of Honor, the Italian War Cross and the Silver Medal of Valor. Admiral Sims said of his work that day, "I know no finer individual exploit in the war."

OUR NEXT form of training was in a construction gang where we started to build the Navy's aviation training station at Moutchic. We built canvas hangars, shoveled sand, broke rocks, slept in tents again. Our mess hall was some airplane crates in which a few F.B.A. seaplanes arrived. These we assembled and flew at intervals in order to keep us from forgetting we were pilots. This tour of obnoxious duty was to last only a few weeks until people from the States began to arrive and take over the building. Some of the Yale unit arrived, including Ens. Robert Lovett, USNRF.

Orders were then reached for us to transfer to NAS LeCROISIC, on the Bay of Biscay near St. Nazaire. We arrived there the first week in November, and the first offensive patrol by an American flyer in the service of the United States was made on November 18, 1917. Our commanding officer was Lt. William Corry, USN.

Pilots of the First Aeronautic Detachment who reported for duty at this station were: Foss Hardendorf, Paul Gillespie, Bob Harrell, Lon Harvie, Charlie Boylan and I. We were still enlisted men in the U.S. Navy. We were joined there by Ensigns Ken Smith, Sam Walk-

er, Reggie Combs, Henry Landon, USNRF, all of the Yale unit, and Ensigns Fred King Becker and Thomas Ryan, USNRF.

We flew French Tellier seaplanes, powered by 220 Hispano engines, and our job was to escort the convoys from the States through our sector from Quiberon to St. Nazaire. Le Croisic, a little fishing village on the north coast of Brittany, was always a welcome sight after a long, cold, four-hour patrol.

Observers at Le Croisic, also of our detachment, were Skaggs, O'Brien, Kneip, Strobe, Hobt, Williams, Brady, Studer, Rourke.

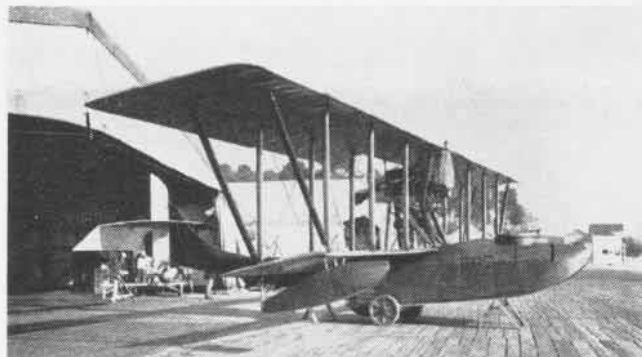
Two of our original detachment, Weddell, pilot, and Eddy Kneip, observer, were killed at Le Croisic. Returning from patrol one afternoon in a Tellier, Weddell put the ship in a tight flipper turn before landing and a wing crumbled. They crashed in the bay just off the station.

One day at Le Croisic, three staff cars drew up to the gate and the young ensign Officer of the Day came to attention. He stood aghast when Admiral Sims and Admiral Benson stepped out of the car to make a surprise inspection of the station. After a mad scramble, we managed to get into uniform for personnel inspection.

Mac Weddell, Paul Gillespie and I stood in formation together, proudly displaying our French Brevets on our dress blues. Admiral Sims wanted to know what they were and what they signified. Weddell explained we were aviators, had been trained by the French Navy and had been on active flight duty escorting the convoys through our sector for many months.

The Admiral turned to Lt. Corry and asked why we had not been commissioned. Corry answered he had so recommended on several occasions. The Admiral then summoned one of his staff who took our names. Within two weeks we were ordered to take examinations for commission. We finally became officers, USNRF.

Our designation as pilot was still that of Student Aviator after finishing three different French schools and qualifying in all types of French seaplanes, plus many months at Le Croisic flying convoy



ONE FRENCH SEAPLANE USED WAS DONNET-DENHAUT



DETACHMENT WAS AT TOURS WHEN PHOTO WAS TAKEN

escort. It was not until I returned home that I became Naval Aviator No. 1832.

Lt. Corry was transferred to Brest and took command of that naval air station. He had been my inspiration in the Navy and I was most anxious to serve under his command again. I therefore put in for duty at Brest, which was granted, and reported to that station in October 1918. Lt. Corry was relieved at Le Croisic by Lt. William Masek, USN.

AT BREST I saw my first American airplane. We had heard much, in glowing terms, about the Curtiss HS-1 seaplanes with the famous Liberty engine. These were arriving from the States. After all necessary equipment for submarine patrol, such as bombs, radio, aldis lamp and battery, pigeons, machine guns, fire extinguishers and a full load of gas were loaded on the plane for a four-hour patrol, nobody could get the plane off the water. In a short time, a modification was made on the plane by adding six feet to the wing span and this aircraft was designated the HS-2. It was still necessary to install three strands of salmon cord on the right rudder bar to offset torque in order to fly this crate.

These planes were assembled at Brest and then delivered to our air stations along the French coast. Planes were also being assembled for these stations at Pauillac, the main aviation supply base which had been established for the use of the U.S. Navy in France.

The French Naval Air Station at Dunkerque had been under periodic attack by German aircraft from Ostend and Zeebrugge and

bombardment from the sea. This was a strategic location for an air base because of the German submarine pits at Zeebrugge on the North Sea.

The French wanted the U.S. Navy to take over and operate this station, but Lt. Whiting would not recommend doing so without a definite fighter cover.

Therefore, the next group to finish training at St. Raphael was ordered to Paris and then on to Issoudun for training in fighter planes with the French Army. After about a month at this school, orders came to report to an RAF school in England for air gunnery instruction. From there, they went to the Royal Air Force Base at Ayr, Scotland, for further combat training in Sopwith *Camels*, S.E.5's, Bristol fighters, Avro's and D.H.4's.

Members of the First Aeronautic Detachment in this group were the following: Landsmen for Quartermaster Velie, Carson, Hough, Ganster, Chapin, Marshburn, O'Conner, Bamrick, Young, Parker, Jernigan, Elliott and Wardwell. They reported for duty at Dunkerque in February 1918 and flew off a canal Hanriot single-seater pontoon fighters with rotary engines. Lt. Godfrey deC. Chevalier was the commanding officer.

Three of our outfit—Carson, Young and Elliott—caught a German submarine on the surface heading for Zeebrugge. Carson, flying a DD, began the attack with bombs, but was beaten off by cannon and machine gun fire from deck guns. Elliott and Young, who were flying cover, attacked and, with guns blazing, wiped out the entire deck crew. Carson, who

was standing off, then returned to the attack, dropped his bombs, and sank the submarine.

WHEN THE Armistice was signed and the war was over, the original detachment was split up, serving all over Europe, so that it was impossible to contact many of the old gang again. But the following members, I knew, would never come back: Barrett, Manley, Weddell, Kneip, Velie, Hough, Ganster, Chapin, Marshburn, O'Gorman, Goggins and Nelson.

Many of the First Aeronautic Detachment on returning home were given the opportunity to continue with the Navy. Some became officers in the regular Navy; others made a career in civilian aviation. Harold Elliott became general manager of Eastern Air Lines, Paul Gillespie was managing director of the Roosevelt Flying School on Long Island. Later, he was with the Civil Aeronautics Administration and, during WW II, he was a captain in the Navy in command of NAS NEW ORLEANS. Pete Parker for many years was chief pilot for Eastern Airlines. Franklin Young spent many years as pilot-captain for Trans World Airlines. Duke Jernigan was head of the aviation department for Texaco, Inc., and was the first man to tow a glider across the United States. Eddie Nirmaier flew for a radio corporation for years. Charley Boylan operated an air service in New Orleans and was killed in a crash.

I have no idea what happened to many of the others not mentioned, but if any of them are still around and kicking, I hope they keep her nose down and fly straight. They were a great gang.



**THE OPERATIONS** officer of Weather Reconnaissance Squadron Four, at a preflight briefing, points out storm area to be patrolled.



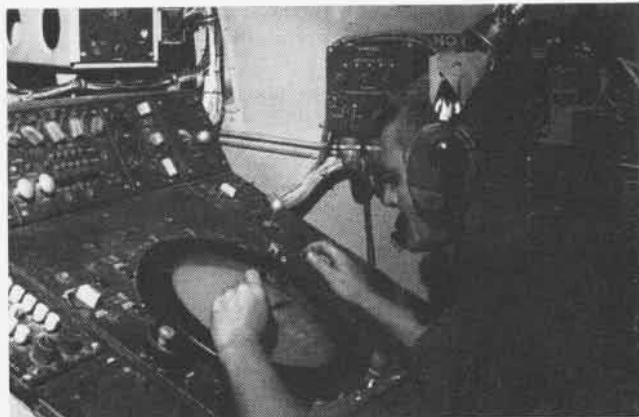
**CREWMEN** give final preflight check to one of the squadron's EC-121K Super Connies. Aircraft will fly a 15-hour weather recon mission.

## 'HURRICANE HUNTERS' ON THE JOB

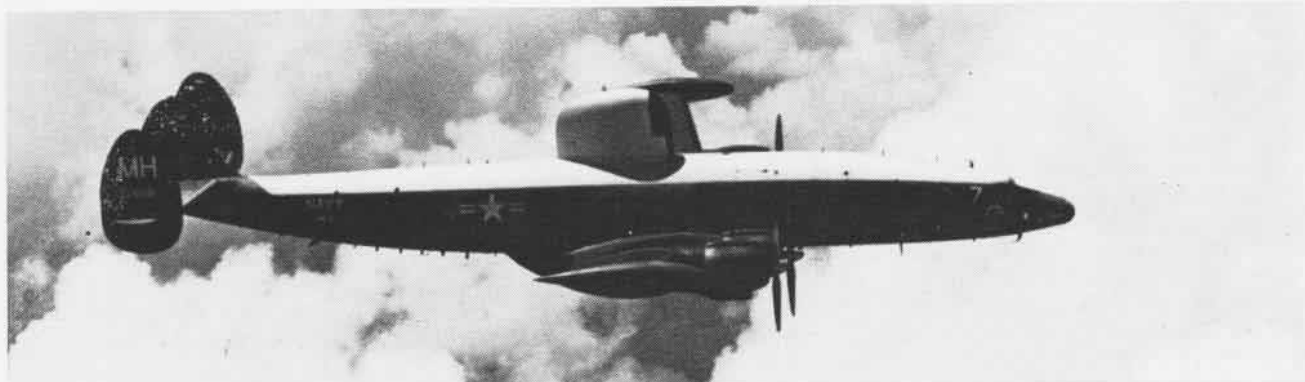
**T**he 'Hurricane Hunters' of Weather Reconnaissance Squadron Four (VW-4) provide advance hurricane warnings. They watch storms in the Atlantic and Caribbean, gathering data on wind force, direction, composition. Data are forwarded to Fleet Weather Facility, Jacksonville, to be evaluated and sent to the National Weather Center, Miami. Commander J. V. Lawrence is squadron C.O.



**KEEPING** an alert watch on engine instrument readings during the flight is the responsibility of flight engineer, ADRC D. L. Halbert.



**AS THE PILOT** flies through hazardous weather toward the eye of the hurricane, a crew member plots storm's course on radarscope.



**A SUPER CONNIE** flies over a storm area while routinely tracking the path of a hurricane. Flying over the Atlantic and Caribbean, the

'Hunters' penetrate storms at 500 to 1,000 feet above the water. As they gather storm data, they often encounter winds of 150 mph.



**AT FLEET** Weather Facility, Jax, hurricane's position is plotted on weather chart.



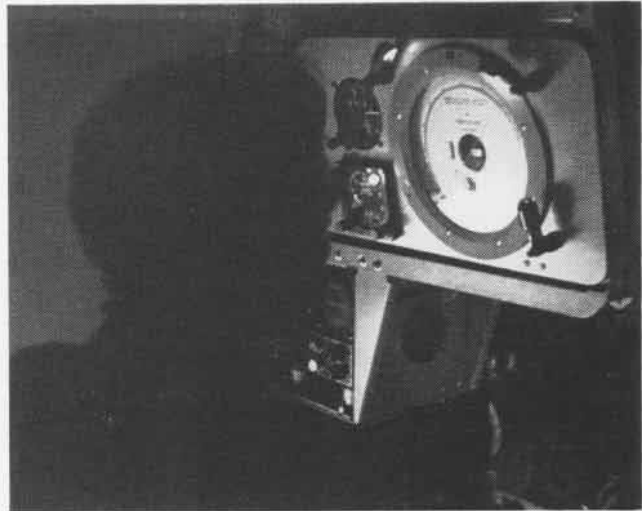
**VW-4** radioman prepares weather report for transmission to the Fleet Weather Facility.



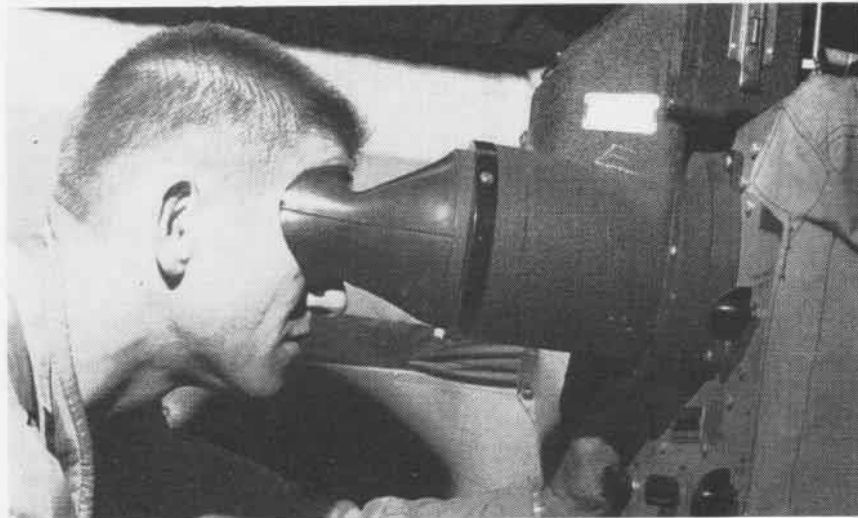
**WEATHER DATA** received at Fleet Weather Facility is teletyped to Miami Center.



**DURING** a reconnaissance mission, the Super Connie's navigator must keep an exact log of the position of the aircraft at all times.



**CLOSE WATCH** is kept on pressure. Connie will climb to 10,000 ft. and eject dropsondes to measure pressure, temperature and humidity.



**DURING TIME** spent over the storm area, a crewman constantly scans the radarscope and photographs all data. Information gathered is forwarded to Fleet Weather Facility, Jax.



**COPILOT** of one of VW-4's Connies instructs his crew over the aircraft's intercom.

# FLEET AIR WINGS ON PATROL



WITH BROOM, safety pin, large "E," and wrench, officers of VP-17 illustrate squadron's clean sweep of three Naval Aviation awards.



IN THE ANNUAL Operational Readiness Inspection, the Hawaiian Warriors of VP-28 scored perfect six-for-six "kills" during ASW phase.

## VP-17's Clean Sweep

Patrol Squadron 17 made a clean sweep of three Naval Aviation awards when it was announced a 1966 winner of the Battle Efficiency E. Earlier the squadron had won the CNO Safety and Aircraft Maintenance Awards.

The triple-crown squadron was selected for the Battle E from among the SP-2H *Neptune* squadrons in the Pacific Fleet during the 18-month period of competition, July 1965 through December 1966. For ten months of that time, the squadron was deployed to WestPac.

In November 1966, the safety award recognized the squadron for 11,000 accident-free hours between July 1965 and July 1966.

Also in November, VP-17 won the CNO Aircraft Maintenance Award which was given for the first time.

In the picture above, VP-17 symbolizes the clean sweep: VP-17 C.O., Commander M. O. Paul, holds the broom; Safety Officer, LCdr. R. L. Breckon, the safety pin; Operations Officer, LCdr. C. R. Behnken, the "E"; and Maintenance Officer, LCdr. W. G. Eason, the wrench.

## Six-for-Six Record

The *Hawaiian Warriors* of Patrol Squadron 28 recently scored a perfect six-for-six record of "kills" dur-

ing the ASW phase of the annual Operational Readiness Inspection.

The inspection was conducted by Fleet Air Wing Two Commander, Captain W. G. Matton, Jr., and his staff to measure the ASW proficiency of the squadron's P-3 *Orion* crews. Each of the six crews was launched on a simulated operational mission: "Search an area of 4,800 square miles off Hawaii for an 'enemy' sub. Find it and 'destroy' it."

"VP-28 has set a new standard," Captain Matton said. "I don't know of another 100-percent kill record for an ORI."

Shown above are the patrol plane commanders and the ASW tactical coordinators of the crews inspected. The PPC's (standing, from left) are: LCdr. Jack Lewis, Lt. Lyle Schaeffer, Commander Ed Lebiecz (VP-28 C.O.), Commander Dick Hedges (X.O.), LCdr. Bob Schatz and Lt. Ernie Killingsworth. The TACCO's (kneeling, from left) are: Ltjg. Bob Cordrey, Ltjg. Cliff Knudsen, Lt. Steve Martin, Lt. Denny Horn, Ltjg. Dave Bennett and Lt. Don Miller.

## Another Hash Mark

Patrol Squadron 22, based at NAS BARBER'S POINT, took time out from a busy schedule in the North Pacific to add a hash mark under

the "E" on each of its aircraft. Commander John T. Coughlin, C.O., aided by Master Chief Zentz and Senior Chief Adams, painted on the diagonal stripes to denote the second consecutive award for the top P-3 squadron in the Pacific.

During the last competitive cycle, the squadron passed a milestone, 100,000 accident-free hours. It also completed a Southeast Asia deployment and another to Adak.

## Three Win Wings

At VP-26's monthly inspection recently, the commanding officer, Commander J. A. Cochran, presented the coveted combat aircrewman wings to three men: AMS1 D. R. Tiedt, ADJ2 A. E. McInnes and AE3 J. G. Peetz. The actual "pinning on" of the wings was done by each man's patrol plane commander.

## Foreign Units at Barber's Point

Combined units of the Royal Australian Air Force Squadron Ten and Royal Canadian Maritime Patrol Squadron 407 spent two weeks this spring at Barber's Point, taking part in operational readiness exercises with units of Fleet Air Wing Two and ASW Group Three.

The 980-man detachment from Australia, commanded by Wing Commander K. R. Rodd, was wel-

comed aboard by Captain W. G. Matton, Jr., Commander Fleet Air Wing Two, and Commander Edward F. Lebiecz, VP-28 C.O. Squadron Ten flies SP-2H *Neptunes*.

A few hours later, Squadron 407 arrived from Comox, British Columbia, also flying *Neptunes*.

During their two weeks at Barber's Point, they participated in ASW exercises, studied mechanical problems, watched films and listened to lectures in order to learn U.S. Navy techniques.

### **Ice Cream Dropped**

VP-46, when on *Market Time* operations, is participating in Project *Goldust*, the airborne delivery of magazines, books and daily newspapers in watertight containers to surface ships in the Seventh Fleet. To supplement *Goldust*, Crew Eight packed ice cream along with the reading material and successfully dropped the container. The subsequent pick-up by a ship revealed the ice cream was "frozen and dry."

VP-46 also reports the presentation of eight awards which include five advancements, a PPC designation and the presentation of aircrewman wings. Commander S. H. Balch, C.O., presented Lt. John Benson with his PPC designation



**COMMANDER Ian J. Johnson**, VP-21's C.O., tries the "E" for size on the sleeve of ADR2 R. E. Huff, currently serving in the squadron. VP-21 won the "E" for the 18-month competitive period ending Dec. 31.

and gave to AX1 Alan C. Bentley his new aircrewman wings.

Recognized for recent advance to the rates indicated were: AMS2 Ronald L. Dietz, PN3 Anthony P. Garibay, AMS3 Ronald E. Vermeulen, YN3 John L. Randall and ATN3 Jesse A. Wilson.

The Air Force Outstanding Unit Award for two years of service with Naval Air Transport Wing, Pacific, at NAS MOFFETT FIELD was awarded to YNC Jack Q. Johnson, AFCM John A. Vincent, ADR3 Edward H. Dapo, Jr., AN Joseph W. Eppich and AMS3 Leon I. Sauls.

### **Red Carpet Welcome**

When VP-42, led by Commander H. L. Beesley, C.O., led 12 SP-2H *Neptunes* into Sangley Point, Republic of the Philippines, early this spring to relieve VP-17, they were given a warm welcome.

The arrival of the squadron marked the beginning of VP-42's six-month deployment in Southeast Asia. The squadron will maintain a detachment of aircraft at Tan Son Nhut Air Base, Saigon. This is the squadron's third deployment to Vietnam in the past three years.

During the 11 months in the States, the squadron completed a vigorous training schedule and captured the Whidbey Island Totem Pole twice out of the three competitive cycles held. The award signifies outstanding performance in ASW at Whidbey Island.

### **Full Steam Ahead**

It's training time for VP-6 and the *Blue Sharks* are following the tradition of "Full Steam Ahead." Flight Crew Seven, led by LCdr. Gerry L. Simonson, PPC, required but one month after being formed to qualify all crew members for Aircrewman Wings. Continuing its outstanding performance, Crew Seven qualified as "Alfa," fully operationally ready, ten weeks after its formation.

LCdr. John C. McMichael went on to surpass Crew Seven's record by leading Crew Nine to Alfa status in 35 days after his designation as Patrol Plane Commander.

The *Blue Sharks*, commanded by Commander John C. Wold, are home-based at the Naval Air Station, Barber's Point, Hawaii.



**ENS. FRANCIS K. Foster**, in this photo, had just completed logging Patrol Squadron Six's 10,000th flight hour for Fiscal Year 1967. He was flying a P-3A Orion while receiving instrument training from LCdr. G. J. Evans.

### **VP-44 Skipper Honored**

Before being relieved as commanding officer of VP-44, NAS PATUXENT RIVER, Md., early in April, Commander Edward C. Waller was honored with the awarding of the Legion of Merit and the Navy Commendation Medal. Vice Admiral Charles B. Martell, the guest speaker at the change-of-command ceremonies, concluded his talk by announcing the two awards for Commander Waller.

The Secretary of the Navy awarded the Navy Commendation Medal to Commander Waller "for meritorious achievement in developing new and highly effective anti-submarine warfare tactics while serving as Commanding Officer of Patrol Squadron 44, during deployment to Keflavik, Iceland, in July 1966."

The Legion of Merit was presented by Vice Admiral Martell on behalf of the President to Commander Waller for being "directly responsible for perfecting and successfully demonstrating to the Fleet the significantly advanced air ASW tactics and techniques."

Commander Waller is assigned to duty under the Commander, Naval Air Systems Command.

# SELECTED AIR RESERVE

## Meritorious Service Medals

Long and faithful service to the programs and objectives of the Naval Air Reserve brought its own reward to three Navy chiefs, members of NARTU ALAMEDA.

Commander Lloyd D. McBeth, unit commanding officer, presented them with Reserve Meritorious Service Medals denoting a minimum of ten years distinguished duty in the program.

Receiving the awards were ADC William E. Crawford and AFCM's John J. Eberle and Paul R. Free.

## Lockheed Trophy

Recently, Rear Admiral R. A. Macpherson, Chief of Naval Air Advanced Training, presented Captain David S. Crockett, C.O. of NAS DALLAS, with the Lockheed Trophy for Recruiting and Retention in ceremonies held during the station's Annual Military Inspection.

Competition for the trophy involves the 18 Naval Air Reserve Training Units in the Naval Air Reserve Training Command. Dallas gained possession of the trophy for having the highest percentage of personnel retained and new recruits brought into the Naval Air Reserve programs during FY 1966.



REAR ADMIRAL WILLIAM S. GUEST

## New CNAResTra

On March 21, Rear Admiral William S. Guest assumed command as Chief of Naval Air Reserve Training at NAS GLENVIEW, Ill. Admiral Guest relieved Captain Louis J. Muery, Jr., Acting CNAResTra.

As CNAResTra, Admiral Guest will be responsible for the training and administration of more than 29,000 Naval Air Reservists.

Admiral Guest comes to his new

assignment from Naples, Italy, where he was Deputy Commander, Naval Striking and Support Forces, Southern Europe. For four months during 1966, he served in an additional capacity as Commander of Sixth Fleet Task Force 65 and directed the recovery of a hydrogen bomb which had fallen into the Mediterranean Sea as the result of a collision of two aircraft near Palomares, Spain.

In December 1941, Admiral Guest was assigned to Bombing Squadron Five on USS *Yorktown*. While with this squadron, he was the first U.S. Navy carrier-based aviator in WW II to sink an enemy ship.

## Aerial Navigation

Thirty Explorer Scouts from the Dallas-Fort Worth, Texas, area may be blazing a new trail in scouting. With the unexplored frontiers of outer space in mind, they are learning the techniques of aerial navigation in a special school at NAS DALLAS.

The eight-week course is being conducted by Lt. Jack Tow of the NAS aircrew training department. It includes basic theory on aerial navigation, plotting, map reading, dead reckoning and introduction to celestial and radar navigation.



COMMANDER McBeth presents medal to Alameda chiefs (l to r) Crawford, Eberle and Free. Total service of chiefs exceeds 60 years.



AT NAS Dallas inspection, Rear Admiral Macpherson presents Captain Crockett with Lockheed Trophy for Recruiting and Retention.

The special school was set up by Captain D. S. Crockett, C.O. of the station, at the request of District Boy Scout Chairman Albert Cupp.

### Like Old Times

Early this spring, two pilots, fitted out with white silk scarfs, leather helmets and goggles, flew an antique open-cockpit biplane into Hadley Field, N.J., to complete the last leg of a flight dedicated to pioneer pilots.

Captain Charles S. Downey, a Weekend Warrior at NARTU LAKEHURST, and Arthur Caithml, a former member of the Air Force, traced the route flown by the early Mail Service pilots on the Chicago to New York run back in the 1920's.

The two-seater biplane, a 1941 Meyers OTW, had its tail assembly painted a bright yellow with "Fly Navy" emblazoned in blue letters. The color scheme is patterned after Navy biplane fighters that flew from aircraft carriers in the mid-1930's.

Hadley Field was selected as the flight's destination because it was the New York biplane terminal and the starting point for America's Transcontinental Air Transportation System.

The two-seater carried no radio. Average speed for the flight was 81 mph. They used 74 gallons of gas and three quarts of oil. Flying under visual flight rules, they followed railroad tracks and highways, just as their predecessors did.

Captain Downey displayed his biplane at Lakehurst during the annual Armed Forces Day Open House celebrated in May.

### Welcome Kits

Among the newest activities at NAS LOS ALAMITOS is its Family Services Center, established to lessen the problems of Navy families transferred to the station.

"Family Services Center has been given the responsibility for giving an official welcome to Navy personnel coming to Los Al," says PN3 Larry Elkins, a staff member of the new office.

The "welcome kits" contain maps of the Orange County area and guides to recreational, health, educational and financial facilities available in Southern California.



'FLY NAVY' and her crew prepare to take off on another leg of their flight dedicated to pioneer pilots of the U.S. Mail Service. Top speed of the biplane is 95 miles per hour.

Listings of available housing in the area are also maintained and may be sent to prospective station residents before they depart their present duty stations.

### ASW Exercise

Recently Naval Air Reservists from six stations, flying Lockheed SP-2E patrol bombers, played "hide and seek" with a supposed enemy submarine off the coast of southern California in an exercise dubbed ResASWEx 3-67 (T).

Reservists from Alameda, Los Alamitos, Dallas, Seattle, Memphis and Olathe participated in the

two-day sub hunt. Their mission: to find the "enemy" sub, USS *Pomfret* (SS-391), and "destroy it."

Flying in areas designated by the operational control center, the Reserve crews dropped sonar-buoys into the ocean to serve as listening devices for the attacking aircraft.

(Sound impulse waves from the submerged sub are "bounced" off the sonar-buoys and transmitted to listeners in the aircraft.)

Each time a "fix" was made, the *Pomfret* would surface and acknowledge defeat. The determined Reservists got quite a few glimpses of the submarine above the surface of the ocean.

### 'Pete' Ross Trophy

VMF-215, MARTD OLATHE, has been selected as winner of the "Pete" Ross Safety Award for calendar year 1966 with 3,857 accident-free flight hours.

The trophy is a tribute to 1st Lt. Joseph F. "Pete" Ross, Jr., a Marine veteran who was killed February 4, 1950, in an aircraft accident while attending an aviation reserve flight drill with VMF-121 at NAS GLENVIEW. His parents donated the trophy to encourage "safety perfection" throughout the Marine Air Reserve Training Command.

The silver and gold trophy is valued at approximately \$5,000.



AT NARTU Lakehurst, Capt. N. V. Scurria (Ret.) enlisted son James in AOC program.

# AT SEA WITH THE CARRIERS



**IN WHAT** Kearsarge crewmen claim is the first operational landing of a C-2, and the first touchdown aboard a CVS, a cargo-carrying Greyhound aims for the flight deck.



**SOUTH** Vietnamese leader Ky is escorted aboard Enterprise by RAdm. R. W. Mehle.

## PACIFIC FLEET

### KEARSARGE (CVS-33)

Record-claimers aboard *Kearsarge* threw caution to the winds when they contended that a pair of landings by a C-2 *Greyhound* from NAS ALAMEDA, Calif., on *Kay's* flight deck culminated in the first operational flights of the new COD aircraft and marked the first arrestments of the plane by a CVS.

*Kay* was serving as a carqual ship off the California coast when Ltjg. J. T. Rozic brought 43 passengers and 3,500 pounds of cargo to the carrier as he piloted the C-2 on the missions.

*Kay* has a new C.O. He's Captain Benjamin C. Tate, who relieved Captain W. L. Nyburg during a ceremony aboard the ship. Captain Nyburg didn't have far to go to reach his next assignment. He simply moved across the passageway to take up duties as chief of staff for Rear Admiral B. H. Shupper,

ComASWGru Five, who flies his flag from *Kay*.

### ENTERPRISE (CVAN-65)

South Vietnamese Chief of State Nguyen Van Thieu presented medals—including some of the country's highest military decorations—to 90 Navy men and Marines during a ceremony held aboard *Enterprise* as the ship operated off the coast of Vietnam.

Assisting Thieu was South Vietnamese Prime Minister Nguyen Cao Ky, who flew aboard the *Big E* with his chief of state in A-6 *Intruders* that took off from Saigon's Tan Son Nhut Air Base. The party that accompanied them included General William C. Westmoreland, U.S. Forces Commander, Vietnam.

The decorations were the first of their kind to be presented to Navy personnel fighting in the Vietnam war zone, and were presented for "gallantry and meritorious contribution."

Earlier, while *Enterprise* was

steaming toward a port call at Subic Bay, R.P., Rear Admiral Roger W. Mehle, ComCarDiv One, held an awards ceremony of his own for pilots of CVW-9. He presented the Bronze Star to Commander C. Ray Smith, skipper of VA-56; Distinguished Flying Crosses to Lt. Arne E. Johnson and Ltjg. Gerald G. Greenamyre, both of VA-113; and the Navy Commendation Medal to Ltjg. William C. Ellis, also of VA-113.

Before they left the line for their well-earned rest in Subic Bay, CVAN-65 pilots had teamed with their counterparts from the carriers *Ticonderoga* and *Kitty Hawk* for combined strikes against the strategically important rail yard at Thanh Hoa in North Vietnam.

### BENNINGTON (CVS-20)

There's nothing like a winter cruise aboard a sleek pleasure ship operating in tropical climes—nothing, that is, unless you're a crew member of the Russian freighter

Belgorod Dnestrovsky. Bennington men observed that even the seagoing version of Ivan Ivanovitch can live the good life.

The *Benn* men have pictures to prove their contention. They were taken from a hovering helicopter dispatched to give the freighter the "once-over" as she steamed toward Haiphong, North Vietnam.

The pictures taken from the HS-8 SH-3A *Sea King* clearly show freighter crew members and passengers having a fun time around a small swimming pool located at the ship's stern.

This same crowd greeted the surprised Americans with friendly waves as the chopper approached the ship. While some crewmen began an impromptu diving exhibition for the "boys in the balcony," others rushed below decks—soon returning with nothing more dangerous than cameras they used to take pictures of the picture-takers.

## BON HOMME RICHARD (CVA-31)

Captain Charles K. Ruiz relieved Captain G. F. Colleran as *Bonnie Dick's* skipper during a change-of-command ceremony held while CVA-31 was operating in the South China Sea.

A VA-76 pilot, LCdr. P. F. Hollandsworth, made *Bonnie Dick's* 129,000th arrested landing in an A-4C *Skyhawk*.

## ORISKANY (CVA-34)

Shortly after he received the Legion of Merit from Rear Admiral Ralph Curtis, ComCarDiv Nine, "for exceptional service in command of *Oriskany* during its 1966 combat engagement in Vietnam," Captain John H. Iarrobino was relieved as skipper of CVA-34 by Captain Billy D. Holder. The *Big O* was in the San Francisco Bay Naval Shipyard at Hunter's Point when the ceremony was held.

Before the change of command, *Oriskany's* crew was informed that the ship has been awarded the Navy Unit Commendation.

## CORAL SEA (CVA-43)

The C.O. of another carrier which recently won the Navy Unit Commendation also turned over his command while his ship was under-



**OUTGOING** *Oriskany* C.O., Capt. Iarrobino, receives pennant from GMCM D. E. Nelson.

going overhaul at Hunter's Point. Captain Frank W. Ault was relieved by Captain William H. Shawcross during a ceremony aboard *Coral Sea*. CVA-43 recently returned from a seven-month combat deployment in waters off Vietnam.

## HORNET (CVS-12)

Twelve foreign naval officers, scheduled to attend classes at the Fleet ASW School in San Diego, Calif., observed ASW operations aboard *Hornet* as the ship steamed off the coast.

## PRINCETON (LPH-5)

*Princeton* was one of the ships comprising the Seventh Fleet amphibious ready group from which a Marine special landing force was sent ashore for a search-and-destroy mission through Vietnam's Quang Tri province, just south of the demilitarized zone. The Marines, taken ashore by helicopter and landing craft, were participating in Operation *Beacon Hill I*.

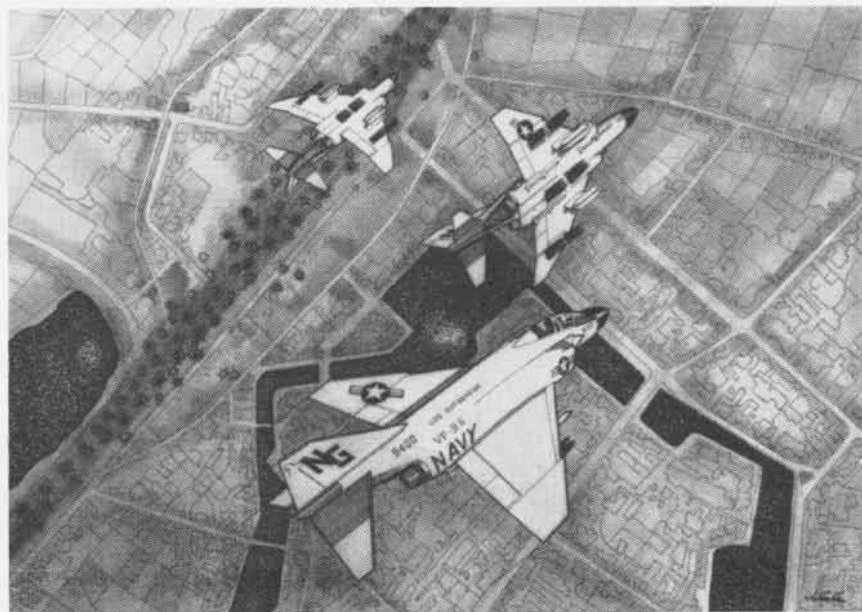
## TICONDEROGA (CVA-14)

It was just a bad day for Lt. Richard A. Luker, a VA-195 pilot flying combat missions off the USS *Ticonderoga*.

First, the engine of his A-4 *Skyhawk* quit operating normally after he was launched on his 172nd mission. He found he had difficulty keeping the aircraft flying straight and level; worse, he kept losing altitude.

Then, after *Tico* controllers guided him back to within a mile of the ship so he could see the flight deck through murky skies, Lt. Luker calmly radioed, "I have no waveoff capability. There won't be enough power to go around again."

Aiming for the number one arresting cable, so there would be three left to catch his tailhook if he missed, the beleaguered pilot



**ARTIST'S** drawing of F-4B Phantoms, launched from *Enterprise* on a strike mission against the Than Hoa railway yard in North Vietnam, is work of Lt. J. J. Griffith.



**STEAM** escapes from catapult as a *Skyhawk* is readied for a launch from *Kitty Hawk*.

brought his balky *Skyhawk* in for what was later described as a "nearly-perfect landing."

But near-perfection wasn't good enough this time. In what was called "a thousand-to-one shot of bad luck," the tailhook neatly skipped over every wire.

As the plane hurtled off the angled deck, its engine sounding like an old Model T, Lt. Luker tried desperately for altitude. The A-4 couldn't give him any; he ejected seconds before the plane crashed into the water.

"All's well that ends well," the saying goes, and for the lieutenant, it did. Shortly after he parachuted into the ocean, a rescue helicopter deposited him back aboard the carrier—soaked, but uninjured, and praising "angel" crewmen LCDr. Paul Travis, Ltjg. Peter Eversole, ADJ3 David Zach and AMI Charles Stecz for their fast work.

## CONSTELLATION (CVA-64)

Rhythm-and-blues and jazz singer Ray Charles and his orchestra and chorus gave a concert for *Constellation* crew members and guests while the ship was moored at NAS NORTH ISLAND in San Diego.

The Charles show took up space on *Connie's* flight deck for only a short time. Later, CVA-64 crewmen began using the hangar bays for their primary purpose: housing aircraft of CVW-14 as the air wing



**HANCOCK** flight deck crewman signals a ship's helicopter as its crew gets ready to land the aircraft after circling on station during a launch and recovery period.

began combat readiness exercises with the ship.

## KITTY HAWK (CVA-63)

As CVW-11 pilots continued to be launched from *Kitty Hawk* on combat missions over Vietnam—including strikes against the Thai Nguyen iron and steel works near Hanoi, a thermal power plant, a ship repair facility and storage areas—CVA-63's number of X000th landings continued to mount.

Arrestment number 62,000 was made by a VA-112 A-4 *Skyhawk* pilot, Ltjg. John Lockhard; a few days later, LCDr. Edward D. Estes, also of VA-112, logged number 63,000 for the ship.



**SINGER** Ray Charles and his orchestra belt out a song for *Connie* crewmen and guests.

## HANCOCK (CVA-19)

*Hancock's* crew has had a busy time of it since the carrier steamed into the combat zone to start her tour with Seventh Fleet units operating off Vietnam. Both at sea and in port, *Hannah* men have had their work cut out for them.

One man who quickly found the rigors of a combat cruise are not without their benefits is AT1 Robert E. Paul, assigned to VA-94 aboard *Hannah*. His qualification for a high reenlistment "multiple" when he shipped over netted him \$8,400—all of it tax-free because of the battle zone exemption.

If *Hannah's* first period "on the line" meant work aplenty for crew members, they didn't show it when the ship made port in Sasebo, Japan. They kept busy participating in a variety of activities that ranged from "people-to-people" projects to a concert by the ship's unofficial rock-'n'-roll band for employees of a nearby china factory.

And 677 of them found time to answer a somewhat gruesome IMC announcement—"Bleed the easy way so that those who bled the hard way in Vietnam may live"—by donating blood for wounded American fighting men.

Then, it was back to the Gulf of Tonkin. In good weather and bad, CVA-19 pilots continued to pound enemy targets as they plunged into the job at hand: Keeping supplies

from moving into South Vietnam. It's been a busy time indeed for the men of *Hancock*.

### VALLEY FORGE (LPH-8)

Captain C. H. Carr, C.O. of *Valley Forge*, represented his ship when she was honored by the Women's Division, Los Angeles Chapter of Freedoms Foundation of Valley Forge, during the group's third annual Patriotic Ball. The *Happy Valley* is being overhauled at the Long Beach Naval Shipyard.

## ATLANTIC FLEET

### RANDOLPH (CVS-15)

*Randolph's* first skipper, retired Rear Admiral Felix Baker, visited the ship he commanded 22 years ago while CVS-15 was in home port, Norfolk.

### SHANGRI LA (CVA-38)

*Shang* crewmen had a chance to see the sights in Palma, Mallorca, and Naples, Italy, as their ship made port calls between operations with the Sixth Fleet in the Mediterranean.

CVA-38's 82,000th and 83,000th arrestments were made, respective-

ly, by the ship's X.O., Commander A. J. Nemoff, in an F-8 *Crusader*, and by Lt. Henry Richard, VA-81, in an A-4.

### SARATOGA (CVA-60)

*Saratoga* left home port, Mayport, Fla., for three weeks of Fleet training exercises off Guantanamo Bay, Cuba.

Before the ship pulled out, 160 CVA-60 sailors had a hot time of it: They volunteered to help fight a fire that burned more than 3,000 acres of land near Jacksonville.

### INTREPID (CVS-11)

The *Fighting I* returned to home port, Norfolk, after a two-week training and shakedown cruise off the Virginia Capes.

### FORRESTAL (CVA-59)

Another carrier operating off the Capes was *Forrestal*. The ship was underway for post-repair trials to test work done and equipment installed during overhaul.

Later, CVA-59 steamed to the Caribbean for a shakedown cruise. One of those inspecting the ship was Vice Admiral Charles T. Booth, ComNavAirLant, who boarded the ship during her six-week deployment to inspect the carrier.

### AMERICA (CVA-66)

CVA-66 was another Sixth Fleet carrier to visit Naples, Italy, during a deployment to the Med. This is her second Sixth Fleet cruise.

### ESSEX (CVS-9)

*Essex* arrived in Portsmouth, Va., for a yard period that was scheduled to last from three to five weeks. Commanded by Captain Van V. Eason, Jr., the ship is homeported at NAS QUONSET POINT.

While in the yards, extensive work to be done included the correction of an arresting gear deficiency and extensive work on the ASW center which included rebuilding with all new bulkheads, soundproofing and new computer.

### LEXINGTON (CVS-16)

Two *Lexington* sailors received the Optimist International's "Respect for Law" award in April.

Ship's Serviceman Third Class Earl E. Rowell and Seaman Joseph A. Johnson were cited for the assistance they rendered a Pensacola policeman during the early morning hours in a local restaurant. The sailors had helped the officer who was in danger of being overpowered by a belligerent, intoxicated man.



**AMERICA**, shown operating in the Mediterranean on her first deployment. The ship visited Naples, Italy, after operations as tour with the Sixth Fleet, has returned to the Med for her second flagship for ComCarDiv Four, Rear Admiral Dick H. Guinn.

# WEATHER-WATCHERS ABOARD HANCOCK

*Photographed by PH3 Merrill Worthington*

**A**BOARD such carriers as USS *Hancock*, there is a class of men who daily tackle the difficult task of trying to stay one jump ahead of the unpredictable weather. As *Hancock* operates in the Gulf of Tonkin, her aerographer's mates use a variety of mechanical aids to provide comprehensive reports needed every hour of the day.



**PLOTTING** a surface map is one of the duties of Aerographer First Class Michael Kalles.



**A HANCOCK** third class aerographer's mate, Ken Blair, checks the atmospheric pressure with a micro-barograph as his CVA operates in the Gulf of Tonkin off Vietnam.



**WHILE AG3** Howard M. Pierce looks on, AG3 Gary L. Jordan monitors data provided by satellite for *Hancock's* recording unit.



**ANEMOMETER** "reads the wind" for AG3's James Sanders and Kenneth Blair as they obtain data on true wind as well as its velocity.



NRL specially-instrumented plane is used for atmospheric electricity studies. Cannon-like projections from the dome take in air samples.



SCIENTISTS Anderson (standing), Wm. Hoppel (foreground) and Stuart Gatham check out instrument console located aboard plane.

## ATMOSPHERIC ELECTRICITY STUDIED

THE SKIES darken, a flash of lightning is followed by a peal of thunder. Suddenly it rains.

Most people are interested in the atmosphere's electrical activity only during a lightning storm. Few realize that there is constant electrical activity above the earth's surface and that an electric current continually flows from ground to atmosphere.

To a small group of Naval Research Laboratory (NRL) scientists, headed by R. V. Anderson, however, atmospheric electricity is an important natural phenomenon the understanding of which is an essential prelude to accurate prediction—and possible modification—of weather, particularly thunderstorms.

Anderson recently returned from a trip to Africa where he spent nine to ten hours at a time at an altitude of 9,000 feet in a specially outfitted NRL airplane taking measurements.

Last fall, during a similar trip to Australia, he gathered data which showed a pronounced variation in electrical activity from universal time. The curve he obtained, however, was different from that obtained from the ground-based instrumentation that has been used for more than 40 years. By comparing the data obtained en route to and over Africa with that ob-

tained on the Australian trip, Anderson will be able to tell whether this variation is a universal phenomenon or whether local effects are so great that it is impossible to generalize.

"If we can correlate variations in electrical activity with universal time on a worldwide basis, we will be able to determine the variations on a local basis," Anderson explains. "Although this is only one aspect of the total atmospheric electricity picture, a thorough knowledge of each aspect is important for understanding the total process in the atmosphere."

The specific phenomenon studied by the NRL scientists is the density of electric current in clear air, normally about .000000000001 ampere per square meter of cross section. A typical electric wire carries a current of 10,000,000 amperes per square meter of cross section.

Current density is measured indirectly by obtaining the electrostatic field strength and electrical conductivity with instruments developed at NRL, which Anderson terms "the most accurate ever built." Through application of Ohm's law, density can be determined. By making these measurements at an altitude of 9,000 feet and by careful attention to other factors, the effects of all variables except time were excluded.

Although it is generally accepted that thunderstorm activity is responsible for generating most of this electric current, there has been no definite proof of the relationship. Several other phenomena have been suggested as possible methods by which electricity gets into the atmosphere. One such suggestion centers around white water or whitecaps commonly associated with the pounding ocean surf. Small bits of positive electrical charge have been found above white water.

The African trip afforded Anderson an opportunity to study this phenomenon in the area near the equator called the doldrums, well known for its hot, muggy, stormy air and absence of trade winds. These weather conditions result from air constantly being carried up from the surface and produce an abundance of white water.

Anderson was trying to determine if the positive charges get into the atmosphere. If so, he hoped to learn whether they contribute to electrical activity on a worldwide basis or if this is strictly a local condition.

Anderson's work is part of the general study of atmospheric physics made by the Ocean Sciences and Engineering Division, Naval Research Laboratory, Washington, D.C.

# HAIL

HAIL, LIKE RAIN AND SNOW, IS JUST ANOTHER FORM OF PRECIPITATION EXCEPT THAT IT IS ASSOCIATED ONLY WITH CUMULONIMBUS CLOUDS.

HAIL RESEMBLES THE ONION IN STRUCTURE: BOTH ARE MADE UP OF MANY LAYERS.



HAILSTONES VARY IN SIZE AND SAMPLES UP TO FIVE INCHES HAVE BEEN RECOVERED ON THE GROUND. A USAF STUDY ON THE SUBJECT REPORTED HAILSTONES ESTIMATED TO BE FOUR INCHES WERE ENCOUNTERED AT 31,000 FT., AND THREE-INCH STONES WERE OBSERVED AT 37,000 FEET.

THE SAME STUDY REPORTED AIRCRAFT FLYING OVER THE U.S. ENCOUNTERED HAIL AT ALL LEVELS UP TO 44,000 FT. THESE HAILSTONES WERE OBSERVED IN AND ALONGSIDE CUMULONIMBUS CLOUDS.



OF 272 AIRCRAFT-HAIL INCIDENTS STUDIED, NEARLY HALF (124) OCCURRED ABOVE 20,000 FEET. OF THE 124 CASES, THERE WERE ONLY THREE IN WHICH AIRCRAFT DAMAGE WAS NOT SUSTAINED.



IN THE UNITED STATES IT HAS BEEN FOUND THAT MAY IS THE MONTH OF MAXIMUM HAILSTORM ACTIVITY EVEN THOUGH THE MAJORITY OF THUNDERSTORMS OCCUR IN JULY.



IT IS INTERESTING TO NOTE THAT HAILSTORMS ARE INFREQUENT IN THE TROPICS. THEY ARE ALSO AT A MINIMUM IN STATES THAT BORDER THE NORTH-EASTERN GULF OF MEXICO.



## An Aerial Observer's Record 500 Missions in Nine Months

A 1st Division Marine, 1st Lt. Albert L. Selleck, became on April 1 the first Marine aerial observer to fly 500 combat missions in Vietnam.

He flew his first mission July 19, 1966. He was forced down twice and wounded once. He has earned 25 Air Medals.

On November 10, 1966, when the plane was hit, the pilot glided it to a bumpy but safe landing.

"Any landing you can walk away from," Lt. Selleck says, "is a good

one. The next time we were shot down, we landed on a strip at Quang Ngai. We 'cart-wheeled' on the runway but again walked away."

Selleck is credited with finding the rocket launchers used by the VC in their attempt to destroy the Da Nang airfield in March. He says that the VC have finally come to realize that the aerial observers are the source of their troubles from jet aircraft.

"It has come to the point where we draw fire from the enemy on the ground at least 25 percent of the time, and it is getting worse."



**DELIVERY** of the 2,000th Phantom was marked by a brief ceremony at the McDonnell Company flight ramp. Captain John C. Kane, Jr., Naval Plant Representative at St. Louis, presented the Air Force F-4D to Maj. er, and Lt. Paul J. Grace, his backseat pilot. Wm. C. Hall (center), the aircraft command-

## 'Grey Ghosts' Claim Record Fly 1,012 Hours in Single Month

The *Grey Ghosts* of Marine Fighter Attack Squadron 531, based at MCAS CHERRY POINT, N. C., shattered the monthly flying record for U.S.-based Marine Corps F-4B squadrons by flying 1,012 hours during March.

VMFA-531 went to MCAS YUMA on March 13 for air-to-ground weapon training. Before arriving there, they had only 124 hours logged but in 18 days, operating with only 11 aircraft, they flew an additional 888 hours.

The squadron is commanded by Maj. Roy A. Seaver.

## Sendoff for Last Hawkeye No. 59 is Delivered to the Fleet

At Bethpage, Long Island, Grumman had a big sendoff for E-2A No. 59 recently. Captain Joseph Pariseau, skipper of VAW-12 at Norfolk, accepted delivery of the big *Hawkeye*, the final one to come off the assembly line.

It has been a little over six years since the first flight of an E-2A.

Plans are on the drawing boards and proposals are being prepared for the E-2B, a more advanced version of the *Hawkeye*.

## PERSONAL GLIMPSES

# Editor's Corner

**THREE WISHES.** In the St. Patrick's Day issue of the Point Mugu Missile, the Question of the Week was: "If a leprechaun granted you three wishes, what would you ask for?" Commander John Gallagher gave these:

1. The energy of my children.
2. The wisdom of my parents.
3. A scratch handicap in golf.

**Brothers in Vietnam.** Tom and George Leach, according to a release from Da Nang, "are brothers who have more in common than kinship." The Leaches are both Marine majors with the same date of rank, who until recently flew A-4 Skyhawks with the First MAF's Marine Air Group 12. Tom Leach, with 205 missions and 25 air medals behind him, was due to leave Vietnam for Cherry Point duty, breaking up the brother combination for a while.

**ANOTHER WAR, ANOTHER CARRIER.** At an age when most men are rocking their porch chairs, Steward's Mate First Class Domingo Membrot is a full time member of the USS *Enterprise's* team. With his 70th birthday coming in July, Membrot is assigned to CVAN-65's admiral's wardroom and begins his working day at 0500, like younger *Enterprise* sailors. He has served on 30 ships, including carriers

*America, Ticonderoga, Lexington, Tarawa and Monterey.* His service in the Navy, broken twice since his first enlistment in 1918 in his native Philippines, includes 30 years, all but nine months spent at sea. When someone calls him "Pop," Membrot pays no attention. "There's no such rating in the Navy," he says.

**From Reserve to Regular.** Lt. Joe Phaneuf, VF-194, departed USS *Ticonderoga* as a reserve officer and was trapped aboard as a member of the regular Navy, logging a mission over North Vietnam between take-off and landing. The regular Navy swearing in for Lt. Phaneuf was conducted via radio in the air over Vietnam by the VF-194 C.O., Commander W. F. Conklin, while both officers were flying F-8 *Crusaders*.

**BACK WHERE HE STARTED.** When Staff Sergeant Lloyd Bell, USMC, retired March 31 as Quality Control Chief with the Third MAF, he was home to stay, home being Orange County, Calif. As a new Marine 25 years ago, Bell arrived at El Toro five months before the Marine station was placed in commission. He was one of the first 50 Marines assigned and recalls that troops were once billeted at the Irvine Ranch headquarters, ate meals in civilian restaurants in Santa Ana.

**Luncheon for VIP's.** As part of their 25th anniversary celebration in the San Diego area, Seabees constructed a "typical" Vietnamese village as part of their public affairs effort. For the opening luncheon, which was by invitation, Seabees handed out combat C-rations from Navy stores. Seabees were standing by with can openers and hot water to make the unusual lunch "both warm and available."

**ANTARCTIC SUNSET.** A note from Operation *Deep Freeze*, datelined McMurdo Station, April 25:

"The sun set here today at 1:02 P.M. in an atmosphere of overcast skies, driving snow and a temperature of minus 67 degrees. The next sunrise will be August 19."

**Persistent Marine.** Maj. Ralph Schiavone, USMC, based at MCAS Ft. Toro, Calif., after ten years of correspondence courses has received a juris doctor degree from the Blackstone School of Law, Chicago.

**EASTER EGG HUNT.** When Marines of the Special Landing Force, First Battalion, Fourth Marines, awoke on Easter morning in Vietnam, they found Easter eggs (in full color) around their foxholes. The surprise was inspired and executed by the crew of the USS *Princeton*. The eggs (210 dozen) were treated by 61 mess cooks aboard the amphibious assault carrier and delivered to the Marines on shore via helicopter.

Said *Princeton's* C.O., Captain Tazewell Shepard, "I'll bet Peter Rabbit would have been surprised to see the way those eggs disappeared."



STEWART MEMBROT POSES IN ADMIRAL'S WARDROOM



CDR. CONKLIN (LEFT) CONGRATULATES LT. PHANEUF

# LETTERS

## Tillamook Reunion

SIRS: The first reunion of all hands of NAS TILLAMOOK is planned for July 27-30, 1967, and will commemorate the 25th Anniversary of the station's commissioning. Reunion headquarters have already been established and mailing lists are being accumulated. Anyone who served there is asked to submit his name and address as well as any other names and addresses he has of former shipmates of the NAS. Communications and reservation requests should be addressed:

Naval Air Station Reunion  
Convention Secretary  
Tillamook Chamber of Commerce  
Tillamook, Ore., 97141

Plans and program will be sent to those on the mailing list.

J. WADE FLAHERTY  
NAS Reunion Committee

## Patrol Wing Ten Data Sought

SIRS: My attention was drawn today to a letter, written by Mr. Cassagneres, entitled, "Historical Data Needed" (re: PBYS) in the NANews April issue. Since part of my life was heavily involved with the gallant though lumbering PBYS, I have answered Mr. Cassagneres' letter and have offered to help him gather data.

His letter, in turn, has prompted me to write to you and ask if you would also help me gather data to complete a book which I hope to publish soon covering the life and death of each PBY in famed—though ill fated—Patrol Wing Ten which fought and was nearly wiped out in the first three months of WW II in the Philippines, Northern East Indies and Australia.

What I need is as much information as possible from former pilots and/or plane crew members regarding the harrowing though factual experiences resulting in the loss of their plane—and, if possible, its identification by squadron and number.

Other stories involving Patrol Wing Ten, as well as photographs, will be greatly appreciated. All material supplied will be properly credited. Photographs will be copied and returned immediately. (For usable photographs, I am willing to pay a fair price.)

As a side note—and a fact with which you may already be familiar, Vice Admiral John J. Hyland (Commander, Seventh Fleet) was one of the most respected pilots and leaders in PW-10. I was fortunate enough to be his copilot for one eventful year.

R. R. BARRETT, JR., CDR., USN (RET.)

2 New Providence Road  
Mountainside, N.J. 07092

## Special Corsair II Tests BIS Trials Held at Patuxent River

As a part of the Board of Inspection and Survey (BIS) service acceptance trials of the *Corsair II*, two of the A-7A aircraft were flown from Naval Air Test Center, Patuxent River, Md., to Edwards AF Base, Calif., early this year for flame-out landing, airstart, and water ingestion trials. Similar tests had previously been conducted on the TA-4F and F-2B airplanes.

Both aircraft were configured with a United Control Corporation Radiation Ice Detector installed by the Service Test Experimental Flight Instrument Laboratory. The ice detectors, mounted in the intake at the throat of the inlet, were designed to illuminate a warning light in the cockpit when 0.015" of ice accumulated. This was the first known use of an ice detector in the inlet duct of a Navy jet airplane.

The first part of the test program was the development of flame-out landing techniques for the *Corsair II* from data provided by Ling-Temco-Vought. Using 60% power, 30° speed brake, flaps UP, Emergency Power Package (EPP) out and landing gear DOWN, the flame-out landing pattern was established. The LTV preflight data proved to be satisfactory and the configuration recommended was verified as being representative of the flamed-out airplane.

And then the test airplane was flown through the flame-out pat-

tern and the engine shut down when turning into the final approach. The next step was to ascertain the minimum landing roll-out distance required by the high, touchdown airspeeds, 160-180 knots indicated airspeed (KIAS), in a flame-out landing. The optimum stopping technique proved to be aerodynamic braking until the nose fell through (125 KIAS), followed by maximum wheel braking.

The second part of the tests was designed to determine the altitude/airspeed envelope within which the TF-30 engine could be successfully relit after a flame-out. These tests involved six days of flying and required the pilot to actually shut down his engine and attempt a re-light at altitudes between 10,000 and 45,000 feet with airspeeds between 150 KIAS and 0.95 indicated Mach number (IMN). The tests, which included the use of both JP-4 and JP-5 fuels, showed that re-lights can be made with JP-5 from sea level to 40,000 feet and from sea level to 43,000 feet with JP-4 fuel.

In the third and final test phase, the problems of water ingestion in the TF-30 engine were investigated. The tests took place behind an Air Force KC-135 tanker aircraft which sprayed water through a refueling boom equipped with a venturi nozzle to atomize the water droplets. On seven occasions, the ice detector warned the pilots of ice formation in the intake and allowed them to leave the spray and descend to a lower altitude to clear the ice.



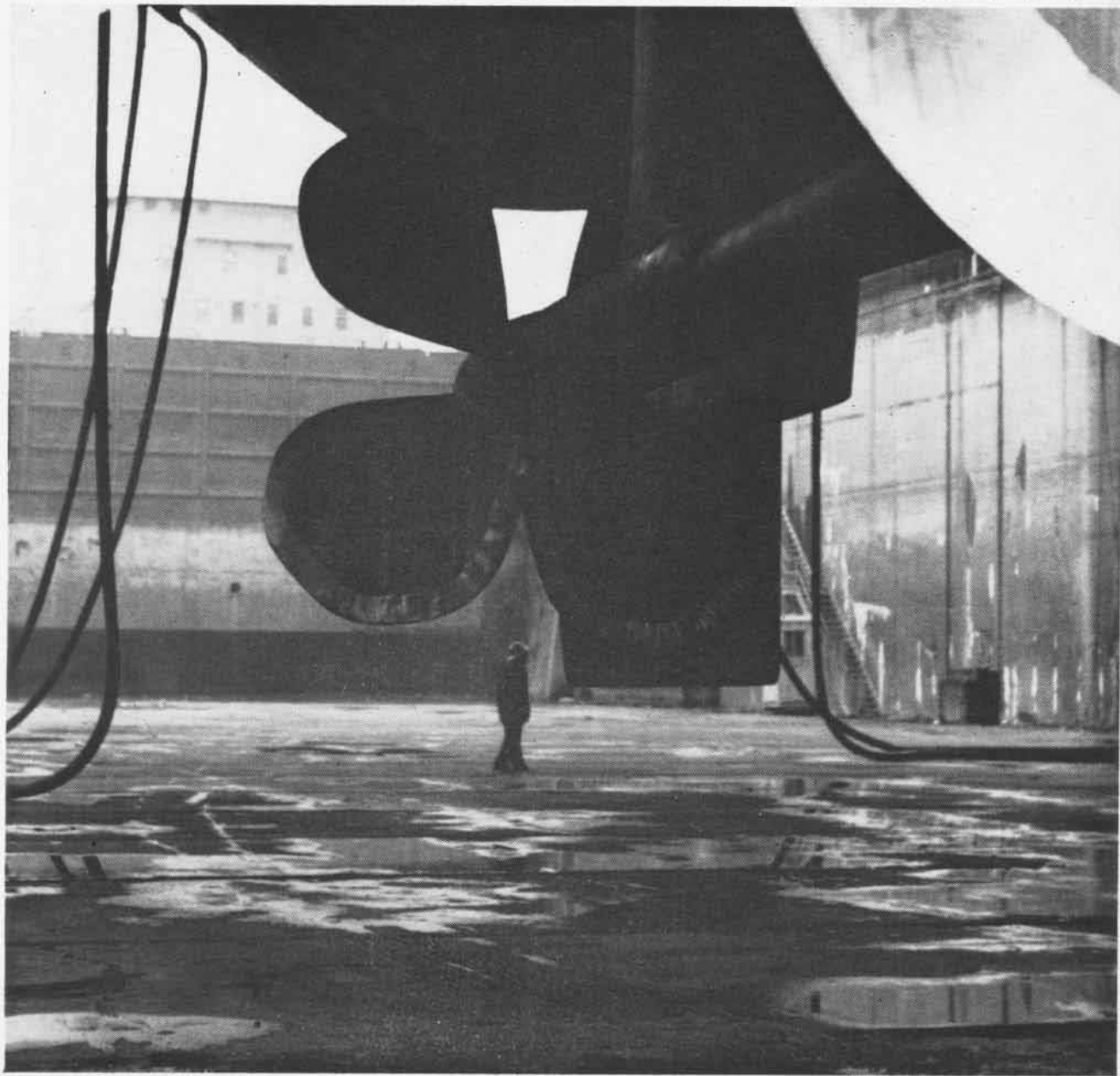
A U.S. NAVAL Test Pilot School evaluation team has completed a limited evaluation of the British Hawker Siddeley DH-125 at NATC Patuxent River. The DH-125 is an eight to ten-passenger executive jet transport powered by two Viper turbojet engines. Empty weight is approximately 11,000 lbs.; maximum gross weight for takeoff, about 21,000 lbs. Team members were Cdr. D. Z. Skalla, LCdr. D. Rice, LCdr. G. A. Aitchison and Lt. G. F. Wheatley.



Patrol Squadron 56, led by Commander C. M. Brozena, is home-based at Naval Air Station, Norfolk, Va., and is under the operational command of Commander Fleet Air Wings Atlantic. The squadron flies Lockheed SP-2H Neptunes. VP-56's designated mission is to conduct all-weather antisubmarine warfare operations.



# *IF THE PROPS STOP TURNING . . .*



NAVAL AVIATION

# NEWS

. . . life aboard an aircraft carrier continues unabated. No matter where your ship happens to be—in the yard, in home port, in the Med or in combat—you still have a story to tell. NANews serves as an effective outlet for your news and photos, but we must get the word from you. 'So just keep those cards and letters coming, folks.'